BUSINESS WEEK

101 34 1940

MEMO: A HITLER PEACE

Business men are trying this week to figure out what a peace made in Germany might mean to life in the United States. It's not the first time they have thought of this, but now it has become hard to think of anything else.

Since the beginning of the war, Business Week, in appraising the outlook, has had to take into calculation the economic consequences of a victory by either side. This week the news from Europe has inevitably weighted the calculation on Hitler's side.

The immediate effects of that news on American business are reported and interpreted in this issue. In addition, however, Business Week releases to its readers, beginning on page 37, an informal inter-office memorandum on "The Economic Consequences of a German Peace" prepared by its Staff Economist.

This memorandum, intended only for the advisement of its editors in dealing with the news and the outlook, discusses realistically the things that *could* happen as a result of a Hitler-made peace. It is shared with readers in the conviction that some of these things might not happen if they were faced realistically by America now.

AGO

AGO

HOW TWO ALLIS-CHALMERS PUMPS THAT COST \$1,01

SAVES DE LA CONTROL DE LA CONT

Again the Facts Speak for Themselves! Read This Story of How Two Modern Allis-Chalmers Centrifugal Pumps in Pennsylvania Quarry Bring Savings of \$1,700 to \$2,400 a Year!

"OUR OPERATING COSTS are too high . . . but new equipment costs money. What can we do?"

This complaint is common enough in industry. Really doing something about it is not so common. That's why the story of E. E. Cooke, vice-president and general manager of the Thomasville Stone & Lime Company, is so interesting. For Mr. Cooke knew his pumping costs were too high . . . and the important thing is, he did something about it!

He called in Allis-Chalmers engineers to diagnose the trouble and make recommendations. He worked with them . . . spent \$1,011 in new Allis-Chalmers pumps . . . to get the right combination to cover all conditions.

Today, the problem at Thomasville is licked! And to prove that it is licked, Mr.

Cooke ordered a report from R. E. S. Swam & Company, consultant engineers. And even though the electric rate is exceptionally low (only .8¢ per kwh), here's what the Swam report states —

"The change on No. 1 Pump (2,000 gpm) will be responsible for $21.6 \ensuremath{\wp}$ saving every hour this pump is operated. The saving on the other new Pump (1,000 gpm) will be $10.6 \ensuremath{\wp}$ for every hour in operation."

Equipment Pays For Itself in 6 to 9 Months!

This means that, depending on rainfall during the year, these two new modern Allis-Chalmers Centrifugal Pumps will bring estimated savings of from \$1,700 to \$2,400 a year, or roughly \$2,000 in an average year . . . will

ONE OF THE TWO NEW ALLIS-CHALMERS Centrifugal Pumps which have helped cut pumping costs approximately \$2,000 a year at the quarry of the Thomasville Stone & Lime Company, Thomasville, Pa. Superintendent F. Shupp looks on.

actually pay for themselves every six to nine months!

CONTRACTOR: V

And what Mr. Cooke did, you can do! For all through industry, forward-looking men like him are cutting production costs . . . getting increased profits . . . making their workers' jobs easier, safer . . . through the use of Allis-Chalmers industrial equipment!

In the Allis-Chalmers district office near you is a trained engineer whose job it is to show you how to slash your operating costs and protect your profit margins. Call him . . . today! Or write Allis-Chalmers, Milwauk

Over 90 Years of Engineering Superiority Work for You When You Specify Allis-Chalmers!



ALLIS-CHALMERS

TO HOLD WATER-



CONCRETE at Its BEST

SWMAING POOL of Harding, Pa.

OWNER: John B. Jennings

ARCHTECT: John L. Manganielle,

Wast Pittston, Pa.

ONTRACTOR: Wyaming Valley Lumber Co.

Wast Pittston, Pa.

N industrial construction or maintenance, in public works, streets, roads, bridges and buildings, concrete gets hard use. Such construction calls for concrete at its best. When concrete should be watertight, it is essential that it be concrete at its best.

You get concrete at its best by using Lehigh Early Strength Cement. It more effectively coats the sand, stone, fills all the voids. It produces a dense, homogeneous mass that quickly hardens for maximum water-tightness, that results in fine surface appearance.

In 24 to 48 hours the strength of concrete made with Lehigh Early Strength Cement equals that of normal cement concrete at 7 days. This quicker curing enables quicker use of the work—may reduce construction cost.

For every concrete job use Lehigh Early Strength Cement to get concrete at its best. Ask your architect or contractor.



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Allentown, Pa., Chicago, Ill., Spokane, Wash.

 The inherent advantages which the belt conveyor has brought to modern industry-faster production

and lower costs—are further enhanced when the belt itself has the capacities of Republic Conveyor Belting for long constant service, uninterrupted by troublesome delays. There is a Republic Belt built to provide this type of performance in all fields of materials handling . . . carrying anything from wheat to rocks. Rubber compounds and duck of highest attainable quality, with a design mechanically balanced for the particular service, make the best belt for the job. Operating costs are reduced to a minimum by the increased belt life which results. All Republic Conveyor and Elevator Belts are permanently protected against mildew by the exclusive Provat Process. Your Republic Distributor is a reliable source of information on all Republic Belting. REPUBLIC RUBBER DIVISION OF LEE RUBBER & TIRE CORPORATION, YOUNGSTOWN, OHIO.

Order Republic Rubber Products from Your Distributor



REPUBLIC

RUBBER

THISBUSINESS WEEK

nomic Consequences of a German Prace. on page 37, takes a long-range view of the effects of the war. For a shurterrange view-the story on page 15, about the immediate effect of France's downfall on business.

Defense

the red tape goes out the windowliveries on defense orders-page 17. . in the defense picture.

Metals

GERMANY has some striking gaps in its economic front-most of them due to the fact that the country is deficient in raw materials. The Axis powers, however, are in a fair way to plug many of these-if they hold what they've conquered and if they can capture rich sources of supply in British, Belgian, and French Africa. What this would mean in vital minerals like iron and copper-page 52.

What's More

THE FCC swings at the radio networks -page 22. . . . DAVE BECK, and the labor picture in Seattle-page 26. . . . INTRO-DUCED by a skillful publicity campaign, a new daily, PM, made its appearance on New York newsstands Tuesday—page 20. ... NATIONAL Association of Retail Grocers of the United States is out to check chains' use of loss leaders-page 22.

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PUBLICATION

THE INTER-OFFICE MEMO On "The Eco-

ON PAGE 13, the Business Outlook tells why the U. S. defense program is the dynamic factor in American economic life right now. . . . KNUDSEN AND STET-TINIUS plough into the job of organizing the Defense Commission's activities, and nevertheless, it's going to be a long time before the government begins to get de-LABOR COORDINATOR SIDNEY HILLMAN has a man-sized job fitting labor into its place in the defense picture. What the various government agencies are doing now to break the bottlenecks of skilled labor. . . . There's been a lot of big boomtalk about the aviation business, but on page 48 you'll find the cold, hard facts about the industry, and what its place is

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CARRIER CELEBRATES ITS SILVER ANNIVERSARY

Many still regard Air Conditioning as but a lusty infant. And yet —

- * The first air conditioning installation
 was made but a few years after the turn
 of the century, by Willis H. Carrier.
- ★ As long ago as 1911, Mr. Carrier presented his famous Rational Psychrometric Formulae, the basis of modern air conditioning.
- ★ In 1915 the present Carrier organization was founded, to put into wide practice the principles of this modern science.

Treading the frontiers of science and industry, these Carrier pioneers have seen the world changed through their efforts and discoveries. Carrier control of indoor atmosphere has helped to create new products and improve old

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1940 is the silver anniversary of air conditioning's coming of age... the 25th year of the Carrier organization. Thanks to the knowledge gained in a quarter century of development and experience in 99 countries of the world,



there is but one rule for you to follow for comfort and better products with assurance of low cost and dependability: call air conditioning by its *first* name... call Carrier. Representatives are listed in the classified section of your telephone book.



CARRIER CORPORATION SYRACUSE, NEW YORK "Weather Makers to the World" DESK BW7

(In Canada, 30 Bloor St. West, Toronto, Ontario)

Phase send me complete information on Carrier Air
Conditioning.

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- · Fatremely outer
- * Rheostat switch controls air
- Revolving grille directs air flow.
- ★ Furniture steel cab-inct in neutral walnut grain finish.
- * Easily replaceable

FOR ONLY A FEW CENTS A DAY! OUT with unhealthful drafts, dirt and plant pollen which

aggravate respiratory disorders
... OUT with disagreeable street noises, street dust IN with zestful, invigorating filtered fresh air! Specify inside width of window frame and current characteristics. Prompt delivery.

ILG ELECTRIC VENTILATING CO. CHICAGO, ILLINOIS, U. S. A.

Based upon 110 volt A.C. motor, for 26° to 43" windows. Five window width. Other panel sixes and motors quoted upon request.





PITCH CONTROL through Mallory Contacts

One of the greatest forward steps in flyone of the greatest forward steps in hy-ing efficiency has been the practical de-velopment of controllable pitch propellers. By controlling the pitch greater speed may be obtained at lower revolutions per minute ... planes can be maneuvered more easily.

This highly important control is main-tained at the desired constant through electricity . . . and that almost inevitably brings Mallory Electrical Contacts into the picture.

Wherever a device or control...or machine requires the making and breaking of an electrical circuit, you are almost certain to find Mallory Contacts at work. They have a reputation for dependability and effi-ciency that makes them a standard specification with leading manufacturers in every field.

P. R. MALLORY & CO., Inc. INDIANAPOLIS INDIANA



RADIO, ELECTRICAL AUTOMOTIVE AND INDUSTRIAL FIELDS

NEW BUSINESS

Sugar for Daddy

FATHER'S DAY has come and gone, and though it may be hard to imagine, there must be some lucky Dads somewhere who actually got some of those gifts that were advertised as being so eminently suitable for the occasion. Some Dad. perhaps, now owns that desk set consisting, not of pen and pencil, but of a pen and a bronze cast of Baby's shoe. And some other Dad may have gotten that electric pants presser to keep in his office ("Dad can be his own tailor!"). Maybe somebody got that fountain pen with the watch on ton of it too. Or that amazing combination tie-holder and pencil. Or, finally, maybe somebody got one of those ties with his initials on it in a big, splashing two-color design-blue on maroon, blue on chocolate, or pale on medium blue. These striking ties were available (and we'll bet they still are) in all initials except I, O, Q, U, V, X, Y, and Z. The stores didn't have any of those letters made up. Oh, lucky Isidore Zimmerman. Lucky Otto Vogel. Lucky Xavier Unger. Lucky, lucky Vladimir Quistenbustle.

Stab at Utopia

THE HARVARD SCHOOL OF PUBLIC HEALTH took on a superhuman task recently when it started an experiment to discover an indoor temperature which would be perfectly satisfactory to both men and women.

Right off the bat, Dr. C. P. Yaglon, who was conducting the experiment, found out that women were just naturally cooler than men. He got some statistics to prove it too. He found out that women's hands and feet were about 5° cooler than men's. Their arms were 4° cooler. Their legs and head were 3° cooler. And their trunks were 1° cooler.

The next thing the doctor discovered was that women's clothes, in both winter and summer, were about as light as men's. You wouldn't think it would be necessary, but the doctor went and got some statistics to prove this too. He found that men's summer clothes weighed about 5 lbs., while women's weighed 1.8 lbs.; and men's winter clothes weighed 8.3 lbs., while women's weighed 2.6 lbs.

Anybody but a research expert would have been discouraged after these discoveries, but they were apparently just what the doctor ordered for Dr. Yaglon. who forged right ahead with his attempt to find the perfect indoor temperature. He dressed a bunch of men in women's clothes, and vice versa, and put them all into a test room. They must have felt pretty silly, but it was all for the good of the cause, because the doctor came

through the ordeal with another batch of statistics.

He found that men in women's summer clothes liked the temperature at 80% as compared with women in women's summer clothes, who thought it was fire at 79.5° (a little cooler, you'll notice-because, no doubt, the ladies were naturally cooler around the hands, feet, arms, legs, head, and-to a lesser degree-trunk) Women in men's clothes liked the temperature at 70°-pretty much the way men in men's clothes liked it.

The obvious conclusion to be drawn from this interesting, if puzzling, experiment is that men and women ought to wear the same kind of clothes if they expect to agree on a comfortable temperature. But the doctor came to a more practical conclusion than that. He merely suggested that women wear more clothes in the winter and men less in the summer-which is another way of saying that there isn't any temperature satisfactory to both sexes. We could have told the H.S.P.H. that in the first place, complete with statistics on the average number of times per year the secretaries in our office say, "Hey, there's a draft on the back of my neck!"

Production for Use

THERE'S A REMARKABLY ingenious and economical new entry in the candy field, consisting of a hard chocolate stick with a hollow center, which is filled with a malt mixture that dissolves when it comes into contact with moisture. This is the way it's eaten: You take the stick and stir it in a glass of milk. The malt in the center dissolves. You keep stirring, and pretty soon you've got a malted milk. The stick is hollow now, so you use it as a straw. When the drink is gone, you chew up the chocolate straw. That leaves you with nothing but the glass. It seems a shame you can't do anything with that but wash it.

Keen Competition

ANYBODY in the house with ambitions to become a bell hop ought to know the kind of competition he's going to be up against, which is why we'd like to report that, at the celebration of New York Hotel Day at the New York World's Fair during National Hotel Week this year (June 2 to 8), the bell hop who won the luggage-carrying derby covered the 60-yard course carrying a suitcase with 20 lbs. of luggage in it, in 10 2/5 seconds: and the bell hop who won the big paging contest had to shout out loud and clear. the phrase, "Paging Mr. Brian Boru McGillicuddihy of Kilgarvan, County Kerry," as well as, "A message for Ignace Drybynsehinski of Omsk, Latvia."

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Taxes Up ONLY ABSOLU axes is that t

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WASHINGTON BULLETIN

ISHNGTON (Business Week Bureau)—besevelt is extending his foreign and gional defense policies to deal with a greases in the Navy contemplate a fleet mag enough by 1945-47 to wage a two-san war without reliance on any British French assistance in the Atlantic.

The hemisphere trade defense plan is signed (1) to prevent a German-domated economic front in Europe from eniring the economy of any one American spublic and (2) to launch a united merican drive against German competitor for remaining world markets.

Trop Surplus First Worry

I FUNDAMENTAL PURPOSE of the intermerican plan is to move surpluses that
the United States and the Latin Amercan republics can't sell to each other
ethout disturbing political and economic
elationships, although the plan proteled by A. A. Berle, Chester Davis,
scretary Wallace, and other Presidential
divisers also contemplates lubrication of
the American trade by supplying capidiff development of new resources and
to lowering customs and exchange barters. Little attempt is made to conceal
the prospect that a heavy financial outby by the U. S. may entail big losses.

Relieves Fear of War

THE NEW HEMISPHERIC EMPHASIS in Bosevelt's foreign policy temporarily uses anxiety that the United States eight become embroiled in Europe's war. Septicism is rife, however, concerning scressful establishment of economic wion for the Americas. The Administration's hope of achieving this goal rests on the assumption that Latin American nations, always intensely nationalistic, have been frightened out of their chill attitude toward the U. S. by the demonstration of the Nazis' violent power, that they are now ready to embrace Roosevelt's doctine of hemisphere solidarity.

War Pattern Unchanged

IHE PLAN for raising naval strength to a new world high provides abundant evidence of the Administration's conviction that the new pattern of war in Europe has not basically changed the pattern for war in America. An army of quick mobile strength will serve to stand off air attacks and, conceivably, to suppress internal uprisings fomented by Nazi infiltration, but naval strength still is relied upon to prevent either Germany or lapan, singly or in tandem, from bringing a major war to American shores.

Taxes Up Sharply

ONLY ABSOLUTELY SURE THING about lates is that they will be boosted again—

next year—and very substantially. The Administration is determined to make excess profits taxes apply to this year's earnings, which is more important politically than economically.

Plant Capacity

Throwing the RFC's resources behind national defense now is hedged by Congressional amendment. Congress has restricted use of RFC funds in construction of government-owned plants to those producing arms, ammunition, and implements of war. Purpose is to forestall possibility of building textile, shoe, and similar plants which might compete with private industry.

Companionate legislation, which has Knudsen's O.K., appropriates \$200,000,000 against a \$963,000,000 program outlined in the War Department for plant capacity needed in a "major defense effort" to produce munitions which can't be obtained from private industry. Private industry will be used, however, in construction, training of personnel, and operation of such added capacity, except at arsenals. Some 50% of the cost would be for equipment and machine tools.

What's to Be Built

Subject to dovetalling into a rapidly changing picture, the general plan calls for permanent construction, to be available as reserve capacity, of 76 ordnance plants, \$558,000,000; 22 chemical warfare plants, \$39,500,000; expansion of two quartermaster depots, \$5,500,000; 30 aircraft plants, \$300,000,000; three aircraft engine plants, \$60,000,000. Listed for preference at the outset is new capacity for aircraft, powder, T.N.T., shell loading, armor plate, aircraft armament, chemicals. Already appropriated is \$30,000,000 for a power plant.

Ford Will Make Engines

HENRY FORD has managed to convince Knudsen that he can tool up in six months to produce Rolls-Royce liquid-cooled airplane engines (page 18) and turn them out at a rate of 1,000 a month or better, despite General Motors' own experience with the similar Allison engine, of which only about 40 a month are yet being produced. Ford has contracted to make 3,000 engines for this country—the first fruit of the Morgenthau-Mead-Knudsen engine standardization.

★ Significance: Ford delivery on this order will indicate removal of the single biggest obstacle to rapid air expansion.

It Won't Be Next Week

Industries not immediately involved in the defense program need make no moves until they are called. An exploratory conference with representatives of the milling industry indicates that the Army and Navy Munitions Board, functioning in conjunction with the Defense Commission, will work through trade associations in making surveys of non-military industries as has been done in industries primarily concerned with furnishing war materials.

Appointment of committees of key men to maintain contact with the Munitions Board is expected to materialize in most cases. Such industry committees, as in the case of grain, will be called upon to consider adequacy of supplies, maintenance and location of sufficient inventories, and distribution methods. Adequate and continuing supplies of raw materials to manufacturing and processing plants must be assured, along with enough finished goods for the armed forces and for the civil population.

* No action yet: Such preparedness programs will be gradually extended, but all this is not going to happen tomorrow or next week.

Machines Without Men

IN THE RUSH to build armament, only scant and grudging attention has been given to manpower for national defense. Congress has authorized machines and equipment for a million men. It has lifted the Army's maximum strength from 280,000 to only 400,000 (the size of Holland's army) and has provided for the training of no auxiliaries other than pilots. High Army moguls complain they will have defense machines without specialists to operate them. But because mobilizing men is different from manufacturing machines, Congress may defer perfecting the war machine's live elements until after election.

*Balky: Congress' attitude was made plain by the hostile reaction to Roosevelt's feeler on compulsory military training, and his toned-down proposal for universal government service for youngsters.

Preserving Democratic Front

ROOSEVELT'S STRESSING OF Pan-American solidarity tends to lessen the threat of a bolt from the Democratic ticket by the extreme isolationist bloc headed by Senators Wheeler and Johnson. F. D. R.—assuming that he will accept the nomination—will be able to hold nearly all the New Deal and Democratic strength, no matter what the Republicans do at Philadelphia.

As a matter of fact, the G.O.P. may easily lose voters who approve attacks on

NO MORE ON-AND-OFF Heating for large Apartment Building

Webster Moderator System Gives 10-Story Baltimore Apartment Continuous, Even Heating

SAVES \$339 IN FIVE MONTHS

Modernized System Delivers the Amount of Heat Required in Each Individual Apartment

NOTHING FOR TENANTS TO DO

Baltimore, Md.—Practically new as apartment buildings go, the fine residential apartment at 100 W. University Parkway was "behind the times" only in its steam heating control.

There were frequent complaints of noise caused by the on-and-off action of the heating system as well as complaints of

underheating and overheating.

In 1938, the owners of 100 W. University Parkway installed a Webster Moderator System of Steam Heating. The result was an immediate improvement, in heat distribution and the elimination of all noise.



costs have been substantially reduced. In the first five months after heating modernization, coal savings amounted to \$339.87.

100 W. University

W. Douglas Riley, Treasurer of the 100 University Parkway Apartment Co., says:

"The nice thing about the Webster Moderator System is that there is nothing for tenants to do except to enjoy the comfortable warmth. Each radiator receives exactly the amount of steam required."

The modernization program included the installation of 21 Webster Drip Traps, heavy duty traps for low pressure service, as well as a new condensation pump.

William P. Rauch, of Baltimore, was the modernization heating contractor.



HEATING COST

GET THIS BOOK . . . Read the fact stories about economy and comfort in the heating of 144 buildings. No exaggerated claims. No promises. Just 64 pages of heating results. Ask for "Performance Facts."

WARREN WEBSTER & CO., Camden, N. J. Pioncers of the Vacuum System of Steam Heating Representatives in 65 principal U. S. Cities—Est. 1888

the New Deal's waste and inefficiency, but who want to be sure that the Administration for the remainder of the year will go the limit to stop Hitler and improve our defenses.

Left-Wing Secret

LIVELY QUESTION IN WASHINGTON: Is Roosevelt trying to nominate Wendell Willkie? The young left-wingers never let a social evening pass without telling three or four fellow guests that "Willkie is the strongest candidate—he's the only fellow we are afraid of." All of these remarks in the "strictest confidence" of course, which, according to the old Washington custom, is rigidly binding until you start home from the party.

Roosevelt is worrying his janizaries again—telling folks who repeat it that, of course, he will not be a candidate. He's got some of them nearly crazy, as most of them admit only Roosevelt can win if the Republicans make a good fight with a good candidate. Cold dopesters figure it doesn't mean a thing; he's been saying the same thing for 18 months, just wants to keep the record straight so that historians will know he was drafted, and much against his own preferences.

Commercial Wing-Clipping

No New COMMERCIAL ABILINES will be approved (except for extraordinary reasons) because pilots are needed in the services and in the training programs, and money can't be spared to subsidize ornamental routes," as one Civil Aeronautics Authority official called them. The same goes for planes—the lines will be lucky to get enough to step up schedules. The Pan American Seattle-Alaska was O.K.'d—we will need it if Asiatics nip us there. *If war comes: The small lines will get their wings clipped, leaving only a trunkline skeleton.

Housing for Military Men

Congress will give the U. S. Housing Authority just enough money to keep a skeleton slum-clearance program going, but Administrator Straus has poked his toe into the door of the defense heaven where appropriations always go through. Loans are being made to two local housing authorities for projects to be built at the Pensacola (Fla.) naval pilot training school and at the Army's Maxwell Field (Ala.) air base.

Though the apartments will be built at military bases several miles out of town, and will be reserved for enlisted men with families and civilian employees, they are being handled as normal local projects.

* Queer angles: (1) That government employees are so low-paid as to qualify for relief housing; (2) that local contributions are required on strictly military housing facilities.

Utilities Run Own Show

CREATION OF A NEW POWER COMMITTEE, working directly under Stettinius on elec-

tric power policy for defense, appears to put the New Deal power cult into the back seat, at least temporarily.

The committee is headed by Gan Dunn of J. G. White Engineering Corand includes also Charles W. Kellon board chairman, Engineers Public Servic Co., representing the industry. Chairma Leland Olds of the Federal Power Commission also is a member, and Army engneers are represented.

Subordination of FPC's ambitious plat to rush in with emergency orders based on the New Deal grid plan is indicated by the President's letter to Olds last week directing FPC to work with the Defense Advisory Commission, and now by appointment of the new committee, in cluding the conservative Army and the industry.

Why Lewis Praises Hoover

LABOR LEADERSHIP, searching for the motive behind John L. Lewis' latest blas at Roosevelt and his applause for Hoover, reasons thus: Big John is afraid the President, despite his promises to labor, will not really try to stop the emasculating Wagner Act amendments from passing the Senate. John thinks the President's strategy is to let the bill come to his desk, then call the C.I.O. leader and demand immediate labor peace in return for a veto of the amendments. Labor leaders figure that Lewis' strategy is designed to show Senate Democrats that he's in no mind for bargaining.

★Comment: Lewis' own lieutenants are worrying over the effect of the Hoover boost on the C.I.O. rank and file. Irritated already by the Lewis criticism of Roosevelt, they are afraid dues-paying members will find the Hoover endorsement a bitter pill indeed.

P. S.

Some Folks would pin a medal on Ickes for refusing belium to Eckner because the Nazis might use it to go to war in gas bags. Eckner at that time said you couldn't get an airship out of its hangar in the next war. He seems to have been right . . . GRAVELLY POINT, Washington's new model airport, will be used by the Army and Navy "in cases of low visibility" on their fields at Anacostia. Nothing is said of the Point's strategic value, but combined with the Anacostia fields di rectly across a mile of water, it will be one of the strongest air bases in the world . . . SECRETARY WALLACE enlisted Roosevelt's aid this week in pointing to huge stocks of wheat, corn, and cottonsufficient to meet any foreseeable needs at home or abroad-because some farmers already are beginning to plow up acreage in the hope of cashing in next year. . . . THE Stettinius-Knudsen Defense Commission has approved a \$25,000,000 appropriation to start construction of Holston Dam and a new TVA steam plant. indicating a determination to increase war industries in the Tennessee Valley.

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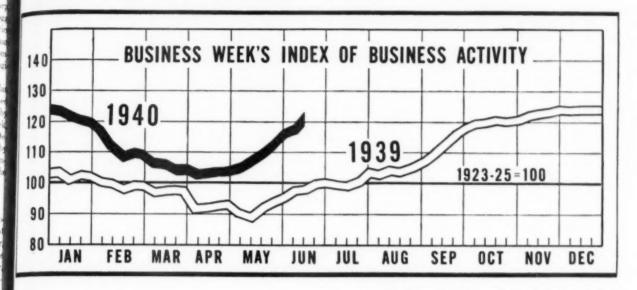
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THE FIGURES OF THE WEEK



	§Latest Week	Preceding Week	Month	8 Months	Year
THE INDEX	*123.4	119.1			
PRODUCTION	-123.4	114.1	111,2	125.6	99.6
Steel Ingot Operations (% of capacity)	87.7	84.6	73.0	90.0	55.0
Automobile Production	93,635	95,560	99,030	118,405	78.305
Engineering Construction Awards (Eng. News-Rec. 4-week daily av. in thousands)	\$12,890	\$10,610	\$8,488	\$8,463	\$9,587
Electric Power Output (million kilowatt-hours)	2,516	2,453	2,422	2,605	2,265
Crude Oil (daily average, 1,000 bbls.)	3,816	3,817	3,835	3,866	3,447
Bituminous Coal (daily average, 1,000 tens)	1,345	11,402	1,325	1,484	1,046
TRADE					
Miscellaneous and L.C.L. Carloadings (daily average, 1,000 cars)	73	72	71	74	69
All Other Carloadings (daily average, 1,000 cars)	45	47	43	40	36
Check Payments (outside N. Y. City, millions)	\$4,039	\$4,127	\$4,493	\$4,707	\$3,875
Money in Circulation (Wednesday series, millions)	87.717	\$7,718	\$7,598	\$7,564	\$6,936
Department Store Sales (change from same week of preceding year)	+14%	-9%	+7%	+4%	+10%
PRICES (Average for the week)					
Spot Commodity Index (Moody's, Dec. 31, 1931 = 100)	156.4	154.7	156.2	167.3	142.1
Iron and Steel Composite (Steel, ton)	\$37.76	\$37.59	\$37.40	\$37.19	\$35.71
Scrap Steel Composite (Iron Age, ton)	\$19.92	\$19.17	\$17.92	\$17.83	\$14.75
Copper (electrolytic, Connecticut Valley, Ib.)	11.458	11.5000	11.365c	12.500c	10.000d
Wheat (No. 2, hard winter, Kansas City, bu.)	\$0.80	\$0.80	\$0.89	\$0.98	\$0.72
Sugar (raw, delivered New York, lb.)	2.760	2.71c	2.77€	2.95	2.800
Cotton (middling %", ten designated markets, lb.)	10.490	10.100	9.450	10.654	9.49¢
Wool Tops (New York, lb.)	\$1.036	\$1.021	\$0.984	\$1.168	\$0.841
Rubber (ribbed smoked sheets, New York, Ib.)	22.19¢	22.19	22.08	20.59	16.29¢
FINANCE					
:Medium-Grade Corporate Bond Yield (30 Baa issues, Moody's)	\$5.13%	5.21 %	5.04%	4.93%	4.91%
U. S. Bond Yield (average of all issues due or callable after twelve years)	2.41%	2.49%	2.43%	2.37%	2.15%
U. S. Treasury 3-to-5 year Note Yield	0.80%	0.84%	0.70%	0.50%	0.39%
Call Loans Renewal Rate, N. Y. Stock Exchange (daily average)	1.00%	1.00%	1.00%	1.00%	1.00%
Prime Commercial Paper, 4-to-6 months, N. Y. City (prevailing rate)	36-56 96	36-86 00	36-36 %	36-36 %	36-56 56
Business Failures (Dun & Bradstreet, number)	245	249	266	270	249
BANKING (Millions of dollars)					
Demand Deposits Adjusted, reporting member banks	20,615	20,306	19,928	18,981	17,212
Total Loans and Investments, reporting member banks	23,661	23,527	23,592	23,523	21,878
Commercial and Agricultural Loans, reporting member banks	4,377	4,368	4,414	4,416	3.831
Securities Loans, reporting member banks	916	912	1,075	1.322	1,214
U. S. Gov't and Gov't Guaranteed Obligations Held, reporting member banks.	11,614	11.564	11,475	11,276	10,498
Other Securities Held, reporting member banks	3,578	3,528	3,474	3,376	3,263
Excess Reserves, all member banks (Wednesday series)	6,610	6,530	6,300	4.849	4.264
Total Federal Reserve Credit Outstanding (Wednesday series)	2,523	2,530	2,518	2,543	2,605
TOCK MARKET (Average for the week)					
50 Industrials, Price Index (Standard Statistics)	96.2	90.6	94.0	120.3	110.3
20 Railroads, Price Index (Standard Statistics)	24.9	23.5	23.8	31.6	27.0
20 Utilities, Price Index (Standard Statistics)	36.5	53.6	55.8	66.3	66.4
90 Stocks, Price Index (Standard Statistics)	79.0	74.4	77.2	98.3	90.4
Volume of Trading, N. Y. Stock Exchange (daily average, 1,000 shares)	886	1762	2,619	784	446
		1-8			
* Preliminary, week ended June 15th. † Revised. ‡ New series. @ Date fo	r "Latest We	ek" on each	series on	request.	





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A complaint, a cancelation, a delinquent account drops on your desk. The signature may mean little to you—a line of type—a scrawl on a piece of paper.

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Rates for all transcontinental calls and most other calls over 420 airline miles were reduced on May 1.

The Bell System cordially invites you to visit its exhibits at the New York World's Fair and the Golden Gate International Exposition. San Francisco.

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USINESS WEEK

June 22, 1940

THE BUSINESS OUTLOOK

National defense program becomes a dynamic force in business expansion, creating as it does a vast new industry—armaments. Already its effects are evident in key industries like shipbuilding, aircraft, machine tools.

VITIONAL DEFENSE has become the domiant economic and social force in the nited States today. It has created a new Justry-armament-the ramifications which will reach into every phase of business life, and bring increased emorment, higher payrolls, widening deands for machinery, and the construcon of new factories. Thus defense benes a positive force for industrial exasion-powerful enough, perhaps, to unteract bad news from Europe.

Getting Used to Shock

It is to be noted that when France fell is week there was a feeling of heartsickes Liroughout this country; but there as no panic. The panic had come weeks o in both stock and commodity marits when people generally first came to salize the vulnerability of the Allies. and if Britain ultimately is forced to sue or peace, again the sorrow may be mater than the shock. For in a sense we we been prepared; our feverish haste to arm is an indication that the danger recognized.

And there can be no question that the fense preparations will go on. Even if e tide of war turned in favor of Engd, we would pursue our efforts to be f-sufficient to defend this hemisphere; ith Germany the victor, the arms effort would be speeded up, if possible. Nor es it make any difference in that repect whether a Republican or a Demont is chosen President. Defense would till be the first order of the day. For lack preparedness has become a daily worry ta time when we may have to back the Monroe Doctrine with force.

Guaranty of Activity

The defense program virtually guarntees a high level of activity in the eavy industries for many months, peraps years. Certainly the program for equipping the Army and building a wo-ocean Navy cannot stop short of 1942: and it is probable that it will ike longer. Already we have some idea of the dollar magnitudes ahead. Conress has appropriated some \$5,000,000,-60 for immediate expenditure, though is doubtful whether our industrial nachine will be able to turn out as much

as \$4,000,000,000 in arms for this government in the next 12 months.

Ten Billions for Defense

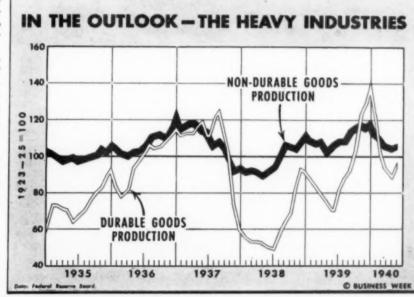
But by the end of 1941 the ability of American manufacturers to turn out ships, airplanes, tanks, armored cars, cannons, guns, and shells ought to be well established. A government expenditure of \$10,000,000,000 a year on defense certainly would then be within the realm of accomplishment. Even if Great Britain were forced to give up the fight and cancel orders in this market, the presumption now is very much against a sudden slump. Just as the British took over most of the French business, so our government would take over most of the British business.

Now a new \$10,000,000,000 armament

industry is to be taken seriously as an industrial pump-primer. The automobile industry, in its heyday year-1929 had a wholesale production value of not much more than \$5,000,000,000. And in 1929 the automobile industry was comparatively mature-new plants were not going up, new machinery was not being developed, new companies were not being formed. On the other hand, the arms industry today is in its infancy; its full dynamic impact on our economy is still to be felt. But already it has had an effect on jobs, as this brief tabulation of the estimated number of workers in three industries indicates:

		1937	1940 5	Increase
*Shipbuil	ding	62,000	95,000	5.5
*Aircraft	and Parts	24,000	65,000	171
Machine	Tools .	80,000	120,000	50
	does not inclu		y yards.	

These, of course, are only a few of the industries which will get big war orders. There will be business for automobile companies, locomotive manufacturers, all kinds of metal-working com-



As the result of war buying of munitions and the government's defense program, the entire industrial complexion of the country has changed. Normally consumer goods industries lead in a business upturn; but right now, as the chart shows, heavy goods

production is making the big gain. Note the reversal in the situation from a year ago. Last year the Reserve Board's non-durable goods index was 108; this May it is down 1 point to 107; but the durable goods index is up 26 points-97 versus 71.

panies. And the simplest way to sum it all up is to look at the rate of steel ingot operations-87.7% of capacity this week, as against 60% two months ago.

It is significant that the heavy industries last month exerted sufficient pressure to lift up business in general (chart, page 13). Early in the month consumer goods production lagged, then picked up with the rise in steel output. Last year the non-durable goods industries turned up in May, the heavy industries followed in June.

Ultimately, of course, there will be a reckoning-when taxes rise sharply to meet the cost of re-armament. But right now the plan is to raise only part of the requirements with additional taxation.

Thus, defense tends to boost governme deficits; thus, as well as stimulating ti heavy industries, defense has come potentially inflationary econor e for (Memorandum, pages 37-44). And t long-sighted business man, in maid ing inventory policy and building play might well take this strategic more factor into account.

The Regional Business Outlook





NEW YORK-This city's apparel industries will be making the big news here next month, when production begins on autumn lines of women's dresses and coats and suits. With national business rising and consumer incomes expanding, manufacturers feel

Makers of men's clothing expect an added fillip from government contracts for army uniforms. This defense buying will not overtax the plentiful capacity of the industry; but it may firm prices and provide a floor for operations, after a record-breaking summer season.

Again, as in last fall's rise and subsequent decline, durable goods production in the industrial centers outside this city is pacing the business advance. Steel operations at Buffalo are up to 90% of capacity. Furthermore, payrolls have gained at railroad repair shops, machinery plants, and shipyards.

Harbor Activity on Rise

Of more than academic interest here is the report that Britain will take over all Allied purchases in this country. The multifarious activities of the Port of New York associated with foreign trade constitute a major industry, and increased war exports have created new employment and lifted payrolls (chart, page 56).

Purchasing power and retail trade have been running ahead of last year in the heavy-industry areas outside the city. Here, commercial and financial enterprises tend to dampen yearto-year change; the low volume of payrolls in the garment trades this spring also was a factor in keeping retail sales down to 1939 levels.

ATLANTA-This month's about-face in cotton prices rounds out a picture of industrial well-being in this Reserve district. Consumers have been reassured and retail sales have begun to increase. But some Jeremiahs note (1) that an artificial shortage of spot cotton caused the advance, (2) that it's the price when cotton is marketed in the fall that counts.

National Defense Helps

Meanwhile, payrolls are expanding. Although munitions industries do not abound here, national defense preparations are creating business. Announcements of work on new or enlarged air fields and army camps are everyday news-like the \$8,300,000 contract this month for the Mobile, Ala., airport. Other big projects are rumored for Montgomery, Ala., Miami, Fla., and Savannah, Ga.

Most promising market now is Birmingham, Ala., "the Pittsburgh of the South." Steel output is running at 90% of capacity, and-in and about the city-coal and iron mines, furnaces, ovens, steel sheet and rail mills, and other heavy industries are sharing in the upturn. Industrial operations and payrolls have held at high levels since last fall, and now the skilled. high-wage workers in these plants are buying durable consumers' goods. New residential units are being built at three times the clip of the early part of 1939.

In the past year, manufacturing activity has been more stable than in the nation, even though cotton textile production has been gradually declining since December. Now expanding national purchasing power (BW-Jun 15'40,p13) promises to lift schedules.

Kansas City-Crop and weather conditions in this Reserve district have created an agricultural paradox. Biggest hazard to winter wheat right now is too much rain and a wet harvest, On the other hand, there is a shortage of subsoil moisture because of last year's drought, and spring-planted grains need still more rain.

For the past few months heavy precipitation has improved farm production prospects steadily. As a result, estimates of the wheat crop are now only 25% below last year. Moreover, stock water supplies have become plentiful, ranges and pastures are in better shape, and spring crops are off to a good start. But corn is "made" in July and August-at the tag end of wheat harvesting. So good rains for corn might be untimely rains for

Farm Income on Par with '39

As predicted (BW-May25'40,p48). the drop in wheat quotations has slowed retail sales-especially of durable goods and luxury items. With price trends partly dependent on European developments and production contingent on the weather, farm income for the year may not exceed 1939's modest total.

Industrially, the bright spots are the heavy industries. Mining of copper in northern New Mexico, molybdenum in Colorado, and iron ore in Wyoming is at high levels. Steel plants at Denver and this city are being stepped up and aircraft production is expanding at Wichita. But payrolls here are largely dependent on the stable consumer goods industries, which are relatively

national business.

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The Regional Outlook surveys each week three of the twelve business areas of the country.

Business Set for Europe's Verdict

Watches for economic results of military decision notably in Latin America. Defense program is speeded U. S.; British take over French orders.

GOGARD FRENCH TROOPS were still fighting in a valiant retreat through central france early this week when the 85-year of Marshal Henri Philippe Pétain apped up to a microphone in the emergery capital at Bordeaux and announced with a heavy heart" that France had a give up the war.

Though the aged French Premier asked Beler for "a means to put an end to stilities with honor," the world knew at France had no alternative but to perpt Berlin's terms, and that Hitler ad won one objective laid down 13 years to make the minute of the state of the s

Reaction to the French capitulation is immediate and world-wide.

Munich streets resounded with the hers of thousands of jubilant Germans is the Axis dictators rode through the herts to the Führerhaus where they set he peace terms for France and planned he next offensive—assault on Britain.

In London, Prime Minister Churchill and a sober and tense House of Commons that he saw "great reasons for intense exertion and vigilance, but none thatever for panic or despair." Vast as the problems are, Britain will undoubtedly fight it out as long as Churchill is at the helm.

frade and Alliances Shift

In the east, Russia moved its armies ato Latvia, Estonia, and Lithuania—wheting the growing nervousness of the kemlin over the wholly unexpected qued with which Germany is winning its sar in the west. A little group of Danish rade delegates, squired by well-informed and very confident German trade adusers, arrived in Moscow and started argaining for Russian grain for the poultry and dairy business of Denmark. And the south, Turkey asked Moscow what it should do next," now that it musiders its tie to the Allies broken by the defeat of France.

Throughout America—from Detroit to Baenos Aires—business showed the effects of the blow. And the President shocked Berlin with prompt announcement that the United States was setting at once a great trading agency to handle the sale of all export surpluses in North and South America (page 60).

Admiral Harold R. Stark, in six hours, succeeded in convincing the Naval Affairs Committee of the House that the new situation in Europe means the emergence of a defense problem calling for a

\$4,000,000,000 naval expansion program which by 1946 will give us a two-ocean navy with a total of 750 fighting ships of 3,760,000 tons. The bill was immediately approved by the House committee.

The blow naturally evoked the sharpest reaction at the New York headquarters of the Anglo-French Purchasing Mission, at 15 Broad Street. Members of the French buying group wept unashamedly when the appeal for an armistice was announced. And almost at once the reception rooms of the mission were crowded with American manufacturers who wanted to know what was going to

happen to the millions of dollars of orders which they had been executing for the French at top speed.

They were not kept waiting long. All of France's war orders were taken over by the British. One Brooklyn factory making aviation instruments, for example, stopped its production of French goods on Friday but resumed again on Monday when assured the British would take the whole order. As late as Wednesday of this week, the French were said to be taking delivery on orders placed months ago.

Plenty of Buyers on Hand

Though the machine-tool industry holds outstanding French orders worth 875,000,000, out of a total of 8128,000,000 that had been placed here by Paris since last September, there was little worry evident, for practically all the orders were for standard equipment which is in such great demand that it would quickly be taken up by any of a number of potential buyers.

Outstanding plane orders for the

Dark Horse in the Limelight



The Republicans face the difficult job next week of focusing attention on their political convention in Philadelphia, while the spectacle of a world cracking up crowds the newspaper headlines. One of the strongest appeals the Republicans can make for business attention is in the sud-

den rise of a business man, Wendell Willkie, as a candidate. The G.O.P.'s line of attack is sure to be plainly marked: "The defense program needs a capable administrator." Therefore, declare Willkie's backers, as the only business man candidate, he fills the bill exactly.

Swelling the Ranks of the Defense Commission



Bower

Dunn

Folsom

As the Defense Advisory Commission swings into action, the appointments, including many business men such as those shown here, start to come thick and fast. Now numbering more than 30, the commission's executive staff is heading toward 100. Among those who have been summoned to serve are the following:

On Stettinius' Staff-

Charles E. Adams, Chairman of the Board, Air Reduction Co.

William L. Batt, President, SKF Industries, Inc.

William C. Bower, Vice-President, New York Central

Col. James H. Byrnes, Executive Officer to Assistant Secretary of War Johnson

Gano Dunn, President, J. G. White Engineering Corp. J. D. East, U. S. Steel Corp.

W. L. Finger, Assistant to the General Manager, Rubber Manufacturers' Association

Marion B. Folsom, Treasurer, Eastman Kodak Co.

Clarence Francis, President, General Foods Corp. Averell Harriman, Chairman of the Board, Union Pacific Railroad

Charles G. Leith, University of Wisconsin T. B. McCabe, President, Scott Paper Co.

Allen W. Morton, Vice-President, Koppers Co. Capt. Allen B. Reed, U.S.N. retired

Blackwell Smith, of the law firm of Wright, Gordon, Zachry, & Parlin

Robert T. Stevens, President, J. P. Stevens & Co., Inc. Walter S. Tower, President, American Iron & Steel Institute

Edward R. Weidlein, Director of the Mellon Institute Theodore Yntema, University of Chicago

On Knudsen's Staff-

John D. Biggers, President, Libbey-Owens-Ford Glass Co. E. F. Johnson, former executive of General Motors Corp. Capt. Sidney M. Kraus, U.S.N.

George J. Mead, former adviser to Secretary Morgenthau (BW-Jun1'40,p24)

H. S. Vance, Chairman of the Board, Studebaker Corp.

Other Appointments-

Paul Porter, Washington attorney for the Columbia Broadcasting System (to assist Coordinator Chester C. Davis) Robert W. Horton, Director of Public Relations, U.S. Maritime Commission (to handle Defense Commission

Dr. Caroline F. Ware, American University (to assist Harriet Elliott on consumer protection)



Francis



Harriman



Johnson



McCabe



Morton



Vance

French amounted to 2,910 combat ships and 400 trainer planes. The British want all of these. They are also boosting their own orders for airplane engines. Ford was reported from London to have been given a contract to build 6,000 Rolls-Royce engines, with deliveries to begin in one month. While Ford was denying this, it was also reported that Washington, working at a surprising new tempo under the aggressive leadership of Mr. Knudsen, had put in its bid for 3,000 of these engines (page 7).

No one in the French buying offices this week knew exactly what was going to happen to the personnel. Some of the members will definitely be incorporated into the British buying staff. Others are being considered to meet Canada's growing demand for experienced engineers. And a few are likely to be taken over by American industries which want the benefit of their experience.

There is no fear that industry will suffer from the loss of the French business. The British have ample cash to pay for the orders they are taking over, and they probably will take up some of the slack themselves with huge new commitments. But even if they do not, the aviation, machine tool, and steel industries-where most Allied business has been placedare now booked for months in advance so that a loss of French orders now, and possibly of British orders in the near future, will not have more than a momentary effect on business, unless Washington fails completely to meet the popular demand for an immediate massive defense program.

Business generally is reserving judgment of the European situation until the

final terms of the Axis-French peace are settled. But it is already evident that leaders are troubled about Britain's position in face of a concerted Italo-German attack. It is being said that if the British are no longer able to maintain the blockade, their job of subduing the enlarged Reich becomes almost hopeless.

It is this potentiality-following the shock of seeing the franc tied to the Reichsmark, German troops in Le Havre and Cherbourg, and the swastika flying over Paris-which concerns American business men at this stage of Hitler's persistent successes (page 37). They look nervously at the riches of his new empire (page 52) and, recalling all that they know of seven years of Nazi methods of production and competition in foreign markets, they speculate on what is ahead -after Paris.

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WASHINGTO They are ea mission. A E Knuds heir exect nts from ery. Head Federal Re tvenue alr beck reve entive sta he organi limbing to Some me ligging int peaking, t istry get while other alary to li will conting still is a sk ion is to organizatio the govern

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Defense Blueprints Speeded Up

Knudsen and Stettinius already elbow-deep in organization job. Months, even years, will be required before government begins to get deliveries on orders.

Washington (Business Week Bureau) — They are early birds at the Defense Commission. A 16-hour day begins at 8 a.m. for Knudsen, Stettinius, and many of their executive assistants and consultants from industry, college, and laboratory. Headquarters in the sumptuous federal Reserve Building on Constitution treme already are too crowded. A spotheck reveals that the commission's executive staff numbers over 30 and that the organization as a whole is rapidly dimbing to 100.

Some men are on a salary, others are digging into their own pockets. Broadly speaking, the executives drafted from industry get nothing but traveling expenses, while others who don't have more than aslary to live on will get paid. Expansion will continue for a while—Knudsen's staff still is a skeleton—but the present intension is to hold down the size of the organization, use all available facilities in the government, avoid duplication.

The commission's activity revolves primarily around the two industrial executives: Knudsen, low and slow of speech, good-humored but decisive; and Stettinius, erect, alert, quick in manner and movement. Both men are informal, easy to talk to. What Stettinius and Knudsen do is best described in Knudsen's own words to Stettinius:

"Ed, I don't want to fuss with anything till I start to cut it up."

Concentrate on the Vitally Needed

Both in organizing the train of material supplies and in coordinating the manufacturing plants that, in rotation, contribute to the final assembly of finished goods for delivery to the Army and Navy, the commission is concentrating on getting the things we are going to be short of the soonest: machine tools, planes and engines, big guns, small arms and ammunition, tanks.

Stettinius foresees no serious problem in obtaining adequate supplies of strategic raw materials—at a price: rubber or a synthetic substitute, manganese, tin (involving possible substitution for tin plate in containers), silk or substitutes.

An abundance of plant and other private facilities have been offered for the defense program. A big part of Knudsen's job is picking locations to avoid "cross fire" in manufacturing operations and needless disruption of commercial orders. So far at least, no priorities have been required, but they will be necessary in a war-size operation.

Both Stettinius and Knudsen are speeding up the ordinarily sluggish processes of government procurement—in an effort to cut down the time consumed in placing contracts before industry can get to work. In peacetime, taking ordnance as example, this takes three months. If the time is cut to two months in contracting for defense requirements, we'll be doing well.

Fixed-Fee Expedient

Many contracts will be put on a fixed-fee basis because costs are uncertain and cost-plus got a black eye in the last war. This expedient will tend to accelerate production, as it will be to the manufacturer's interest to fill his contract quickly. The fixed-fee basis has a disadvantage, however. In the absence of automatic elimination by the low bid, everybody and his brother will be trying to get the business. Much sifting will be necessary and a knowledge of what some items normally have cost will provide a yard-stick.

Speed is the criterion, but the government's business must be fed out without overloading industry. Assuming that raw materials and labor are available, from eight to 12 months are required to set up a new ordnance order and maximum production is not reached until the second year. This may be cut as low as four

months in plants which have had "educational orders," to 10 months if production contracts have been preceded by production studies, on which the War Department now defrays part of the cost.

For many concerns who get government contracts, however, it will mean starting from scratch. That Allied buying has educated U. S. plants in the manufacture of military equipment is true only of aircraft (page 48). Before the scramble began for everything they could lay their hands on, the Allies had bought only \$30,000,000 of ordnance in this country. Our own Army has been a poor customer. The money Congress has appropriated for ordnance furnishes a handy index of public sentiment regarding national defense: \$25,000,000 for 1938-875,000,000 for 1939; 8150,000,000 for 1940; \$600,000,000 for 1941. That's climbing fast-so fast that the last deliveries on some orders out of 1939 funds will not come through until 1942-but it's only a fraction of the \$6,000,000,000 a year output of ordnance that, it is estimated, would be demanded from 1,000 plants for "total defense."

Not a Quick-Starting Juggernaut

The point is that it will take time to produce. Knudsen, Stettinius, and their razor-edged staff may drive all day and in their hotel rooms at night figure out new means of speeding output, but no juggernaut will start rolling tomorrow morning. Ford's 1,000 planes a day (page 18) already are a reality in popular imagination, but the \$5,000,000,000 which Congress has voted for national defense won't all be converted into orders by the time the next Congress convenes in January—and it will take 12 to 18 months, even two years to get deliveries.

We are now at the 1917 stage, without



One of the first fruits of the national defense program—an increase in the number of applicants for jobs in the

War Dept. Job-hunters are signing up here, in the martial atmosphere of the Munitions Building.

the head start provided at that time by a previous large volume of Allied orders. And a much bigger job is ahead than in 1917 because war today is a material war, not a man war. The saving feature is that for the first time the United States is preparing for a possible war instead of waiting until it is involved in one. In 1917 there was vast confusion. The defense commission's policy is to avoid confusion this time by an improved organization.

Will Try to Minimize Dislocations

The potential in dollars available for defense without straining our total economy is estimated at \$15,000,000,000,000 to \$25,000,000,000. All parts of the economy will not, of course, be affected evenly, but this estimate assumes maintenance of a normal civil and commercial life. Both Leon Henderson and Miss Harriet Elliott are keeping their fingers on this angle of the situation.

Agriculture is abundantly able to produce, in sharp contrast with the 1917 situation, when expansion and conservation of food supply were essential. A necessary link between agriculture and national defense is recognition that the public must help pay the cost of carrying inventories, as farmers can't be required to bear the entire impact of the loss of export markets. As Commissioner Chester Davis sees it, the problem is to find new outlets for consumption in order to ease the burden.

Still in the preliminary stage is the task of supplying skilled labor where it is needed (page 45).

No Time to Re-Tire

FIRST CASUALTY of the national defense program is the wide-base tire.

Both the automobile and the tire companies are reported to have agreed that any widespread attempt to use the new tire would throw a huge volume of work upon mold and tool shops in both industries, with the result that national defense might suffer. And so they've shelved the innovation for all 1941 models.

Studebaker had adopted the wide-base tire, other auto makers had turned it down pending further development. Ford, reputedly, was the last manufacturer to make a decision. Had he adopted the wide-base design, other manufacturers might have been forced to reconsider.

The public will not suffer by the decision, because present tire equipment is highly developed. Several leaders in both auto and tire industries have counseled against haste in developing the new design and rim contour.

Ford Speeds Plane Job

Engine experimentation of last two years helps; problem is to get tools in reasonable time.

THANKS TO THE FACT that the Ford Motor Co. started experimentation on its airplane engine a full two years ago, plans for production of planes and simplified Rolls-Royce type engines are proceeding faster at the Ford Motor Co. than the public might logically expect. Ford is neglecting nothing that will help to make good on whatever output is desired by the government. Preliminary estimates have already been asked for some equipment with which to fabricate the plane fuselage and wings, and machine tool suppliers looked for drawing releases on the motor this week.

Welding is essential to mass plane output such as Mr. Ford envisions. His organization is fully familiar with the process and may be counted on to employ the latest principles of automobile body shop practice. Stampings produced from huge power presses either in the Rouge plant or by suppliers, would probably be assembled in high-speed hydromatic type spot welding machines. Such equipment is capable of producing several hundred spot welds per minute and can keep step with the stamping department. Whether stainless steel or aluminum will be used may depend upon Washington.

Riveting is out of the picture for mass plane output because of its slowness and cost. One well-known engineer estimates that it costs 10¢ to drive a rivet in a duralumin airplane assembly, as is now done by most airplane companies, because of the time spent in aligning the parts, drilling the hole, inserting the rivet, driving, and inspecting it. A spot-welded assembly is usually made in a matter of seconds after quickly locating and clamping two or more pieces in a simple jig.

Experience Behind Program

Engine manufacture will prove the bottleneck in Ford's aviation plans. Yet almost two years ago the Ford organization laid rather complete plans to produce several Rolls-Royce engines daily in a French plant. Those plans were canceled at Mr. Ford's order, but the experience gained, plus activity in recent months, should speed the present program. The aim during the past few months has been to simplify the Rolls-Royce engine, especially the supercharger. Since so many dimensions are said to be closely akin to or identical with those of General Motors' Allison engine, possibly an attempt will be made to make certain major assemblies, at least, interchangeable.

Ford isn't going to go whole hog on the manufacture of 1,000 planes per day and 2,000 engines per day (one engine per ship and one engine for reserve). Nor is he saying what the preliminary output

Made in Mississippi



It was a big event for Gulf Coast shippers when the Ingalls Shipbuilding Co. of Pascagoula, Miss., launched its all-welded, rivetless cargo ship, the S. S. Exchequer recently—for it was the largest ship ever built by a Southern shipyard. The launching was tangible evidence to Mississippians of at least one success of the recent Balance-Agriculture-with-Industry program (BW—Apr13'40,p23) too. The Ingalls yard, a subsidiary of the Ingalls Iron Works of Birmingham, Ala., was completed in May, 1939, as part of the "Bawi" plan.

of the "Bawi" plan.

The Exchequer is one of four smooth-skinned ships to be built at a cost of \$3,000,000 each for American Export Lines. They can be easily converted to Navy use. The weld construction, which eliminates rivets and overlapping of iron plates, reduces the weight of the ship by 7%-11%, and is similar to the process used by Germany in constructing pocket battleships.

will be, but previous practice will be followed—to tool up for a fraction of the requirements and then duplicate setups when the "bugs" are removed from the first, or pilot, installation. Rumor has it that equipment would be bought for 20 engines per hour; that output would probably exceed anything now existent in the aviation field. On a one-shift basis, five days a week, the monthly output would approximately 3,500 engines, and possibly 1,750 planes.

Mr. Ford's problem will be to get machine tools in adequate number and in a reasonable time. It is unlikely that most key suppliers can give him the equipment needed in less than four months. Machine-tool builders have been informed that they will be expected to give all needed assistance regardless of their order

book situation.





LIGHTER key-stroke and remarkable new quietness of operation are among the host of improvements built into the new Model M Comptometer.

He: Miss Dale, you're a fast worker!

She: Thanks! But it's just that new

MODEL M CUSHIONED-TOUCH

COMPTOMETER

"Comptometer Economy" is a familiar (and pleasant) story to executives in almost every business and industrial field. It's a story that "boils down" to more figure work handled in less time at lower cost, through high speed, Controlled-Key accuracy, flexibility—and modern Comptometer methods.

And now, the handsome new Model M Cushioned-Touch Comptometer offers all the fundamental Comptometer advantages, together with many important *new* features and improvements which contribute to increased figure-work savings.

A demonstration of "Comptometer Economy," as it applies to your own figure-work problems, may be arranged by telephoning your local Comptometer office . . . or by writing direct to Felt & Tarrant Manufacturing Company, 1733 North Paulina Street, Chicago, Illinois.

NEW FEATURES OF THE MODEL M CUSHIONED-TOUCH COMPTOMETER

For taster, easier operation:

Lighter key-stroke Flexible keyboard One-hand subtraction Improved decimal pointers

For greater quiet:

Mechanism floated in rubber Scientific soundproofing

For improved appearance:

Cancelling lever built inside case

New color and modern, simplified lines to
harmonize with modern office interiors

For minimized eye-strain:

No-glare answer dials Larger, more legible answer numerals Restful grey-green color



Hitler Arrives

Business

MARKETING

ADVERTISING . MERCHANDISING . SELLING

PM Hits the Street

New daily is on its way with new formula, high hopes, and over 173,000 subscribers.

Over 11,000 experienced newspaper workers applied for jobs on the new daily, PM, which appeared on New York newsstands last Tuesday a.m. The figure gives some measure of the newspaper employment situation after years of foldups and consolidations. It also indicates the newspaperman's hope that the venture may point the way to a new technique, applicable in other towns, which may create a wider market for jobs. PM gives employment to 151, most of whom left other papers at no increase in salary.

Adroit promotion plus natural curiosity resulted in a scramble for PM's first edition. Whether this demand at 5¢ per copy daily and 10¢ Sunday will hold in competition with newspapers at lower prices remains to be shown. Circulation must put the paper over financially, since PM carries no advertising, a policy that has been widely plugged as a guarantee of unbiased coverage.

of unbiased coverage.

What readers saw was a smaller than tabloid paper, printed on high-grade pulp stock, combining certain features of the tabloid and the picture weekly but unlike the weekly newsmagazine. Illustration (50% of total 32 pages) consists of some drawings and maps, a great many photographs. Photo lay-outs sometimes tell their own story as in *Life* and *Look*. News is departmentalized: stories are short; spacing between generous. Each story is signed with the initials of the author.

No Conspicuous Waste

PM's headquarters is down a quiet, red brick street in Brooklyn. A dark beauty with Hollywood eyelashes presides at the entrance. She directs visitors up two flights of unplastered stairways to the editorial rooms. They occupy the top floor of Munyer, the firm which will do PM's engraving, typesetting, stereotyping. Printing will be done at the Brooklyn Eagle plant. There is a Manhattan office at 1472 Broadway. Some day PM hopes to consolidate its activities in a building of its own. Right now the management is playing wise, is wasting none of its capital on marble halls, express elevators or fancy doormen. It is being realistic about a problem that is essentially one of production.

In the PM city room newspaper men miss the conventional "desk" where all stories (except sports and financial) are edited and heads written. Each PM

Meet Mussolini

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Market Mussolini

Ministry Propose to Exact for Stopping Definition

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editor is supreme in his department. He is assigned space and handles all stories in his field. Liaison between the various departments is through five assistant managing editors, all channels heading in to George H. Lyon, managing editor. Also missing was the skilled copyreader's knack for taking the heart out of a story and displaying it in an arresting headline. Each *PM* writer provides the headings for his own stories.

Heralded Lavishly

The excitement attending the first issue of PM was due largely to a very fine pre-natal publicity campaign. About \$275,000 was spent on advertising, promotion stunts. Radio was widely used and was duly generous in consideration of the fact that PM is not competing for advertising and that it has an extensive radio section. Besides using radio advertising, PM bought space in the New York dailies, The New Yorker, Cue, and Esquire.

Direct mail solicitation consisted of some 1,500,000 mailings. By Monday more than 173,000 subscriptions (\$14 a year by mail) had been booked. PM's first press run was 300,000. (It is estimated that the paper can break even on a circulation of 225,000.) It went on sale at 6,000 to 8,000 newsstands in New York's metropolitan area, the periodical's immediate field. Publishers will watch returns of unsold copies from stands-an item that has helped break the back of many a new periodical. Newsdealers will accept subscriptions to PM and make deliveries. Each has to set up his own delivery arrangement.

First edition of PM appears on New York streets at 10 a.m. There are two other editions later. This means (at the outset, at least) that most of the staff must report at 2 to 3 in the morning and work till the paper is out. Brutal hours these. They must be accepted as further proof that the men who left secure jobs to go with PM feel certain of its success-

Clipper Service to Alaska



Pan American Airways' Alaska Clippers this week were scheduled to begin regular air mail service to Alaska, flying from Seattle to Juneau. Regular passenger service starts on June 24. The 950-mile flight will take seven hours, with one stop at Ketchikan, about 230 miles south of Juneau. Planes will leave Seattle on Mondays and Thursdays each week,

and return on Tuesdays and Fridays. In Seattle, the big four-engine Sikorsky flying boats will connect with domestic air lines; in Juneau, the line will connect with regular flights of the Pacific-Alaska Airways, a Pan-American subsidiary. By this route, New York will be only 36 hours away from Nome, important northern city on Bering Sea.

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Big names write the success story of the Studebaker Champion



Sensational new low price car proves its money-saving conclusively

... wins repeat orders from important fleet buyers

EVERYTHING that Studebaker has claimed for the Studebaker Champion has now been confirmed in actual service.

Big buyers of cars for salesmen and other field representatives have tested this remarkable Studebaker thoroughly and are now ordering it in quantities.

In the Gilmore-Yosemite Sweepstakes, the Studebaker Champion proved itself 17% to 29% superior in gas economy to all the other largest selling lowest price cars.

In the hard day-after-day driving of fleet users, the Studebaker Champion has made that decisive victory stand up.

Built with the same care and by the same master craftsmen as Studebaker's larger cars, this roomy, restful-riding, easy-handling, surefooted Studebaker Champion offers you real opportunities to economize on your motor car fleet expenses.

See your local Studebaker dealer now and arrange for a no-obligation try-out of one or several Studebaker Champions in your service. Substantial allowances made on other cars. C.I.T. terms if you wish.

JUST A FEW OF THE MANY REPEAT

AMERICAN GAS & ELECTRIC CO. New York, N. Y. ARMOUR & COMPANY ARMSTRONG CORK COMPANY ASSOCIATES INVESTMENT COMPANY BEECH-NUT PACKING COMPANY Congloberio, N. Y.
COCA-COLA COMPANY CUDAHY PACKING COMPANY DEVOE & RAYNOLDS CO. INC. FIRESTONE TIRE & RUBBER CO. Akron, Ohio GENERAL ELECTRIC COMPANY Schemoctody, N. Y.
GENERAL PETROLEUM CORP. OF CAL., HARTFORD ACCIDENT & INDEM. CO. LEVER BROTHERS LUMBERMENS MUTUAL CASUALTY CO. THE OHIO BELL TELEPHONE CO. PACIFIC GAS & ELECTRIC CO. Son Francisco, Cal.
PILLSBURY FLOUR MILLS CO. PROCTER & GAMBLE CO. QUAKER OATS COMPANY RAILWAY EXPRESS COMPANY REO MOTOR CAR COMPANY ROSS GEAR & TOOL COMPANY SOCONY VACUUM OIL COMPANY STANDARD OIL CO. OF INDIANA



WESTERN ELECTRIC COMPANY

WESTINGHOUSE ELECTRIC & MFG. CO.

WILLARD STORAGE BATTERY CO.

Hit Food Price Cuts

Grocers plug for laws to stop chains' use of loss leaders; private brands worry manufacturers.

Something like 13,000 grocers flocked to New York this week for one of the biggest annual meetings of one of the biggest of all trade associations, the National Association of Retail Grocers of the United States, Major highlight was the sending of a proposed platform plank, for the benefit of small business. to the resolutions committees of the Republican and Democratic parties.

The plank calls for: the abolition of

interstate trade barriers; extension of the existing food- and cotton-stamp plan for the distribution of surplus commodities; elimination of government competition with private enterprise; repeal of the federal license tax on oleomargarine retailers; increased appropriations to the anti-trust division of the Department of Justice for an investigation of chain practices; and recognition by all groups that national defense is the paramount interest. That grocers are willing to do their part was indicated by the resolution that "we applaud and approve the recent blanket 10% increase in our taxes." And, as preparation for appear gency, the association planned the immediate establishment of state and sec-

tional "food councils" to aid government agencies in handling of food in wartime,

As is customary at N.A.R.G.U.S. conventions, chain stores were condemned as a "menace to American ideals and purposes." Significantly, however, little time was spent in discussing the Palman bill to tax the chains out of existence, which the House sub-committee this week rejected emphatically. N.A.R.G. U.S. will put major effort in the coming year behind the enactment of more state "loss leader" laws.

In that, the retailers will have the help of the Associated Grocery Manufacturers of America, who met a week earlier in Hot Springs, Va., where they worried about the menace of private

Manufacturers say that in the last eight or ten months chain stores have increased the practice of "burying" national brands, and have pushed their own private labels harder than ever. Two reasons are given for the chains' action: dissatisfaction with margins on national brands; realization that the Robinson-Patman Law really does away with the old price concessions.

How to meet the problem, manufac-turers don't rightly know. If they fix prices on their products under the fair trade laws, they assure satisfactory margins but only widen the price differential between national and private brands. They've considered special advertising allowances for retailers who cooperate with favorable displays, but this brings up the bugaboo of the R-P Law, which compels essentially equal treatment of all dealers. The problem isn't yet desperate, because sales of national brands are holding up, but there are some manufacturers already willing to join independents in demand for a law to prohibit manufacturing by retailers.

Cooling HIS HEELS? HE WAS Melting 'EM!



"Wow, what a hot box! Can't get waited on, either. They must think I'd like to cool my heels. I'd melt 'em. I'm walking out!"



2 "Now, this is something like! Let me get a couple of chestfuls of that breeze. R & M Air Circulator? Some fan, Mister!"



"So you walked out on that first store because they didn't have a fan! How mar-velous! Now tell me how I can walk out!"



"You don't have to walk out, darling. I got the idea on the way home—it's an R & M too—best there is! Isn't it a pip?"

AERPING peace on the business front and at home that's what R & M Fans are doing this summer. Big R & M Air Circulators and exhaust fans deliver thousands of cubic feet of breeze per minute, in stores, offices, restaurants, and workshops. Attic fans and in-the-window portable home coolers refresh the whole house or apartment. Beautiful, quiet R & M table or pedestal fans make living rooms and bedrooms blissfully comfortable. . . . No finer fans are made-and cheaper fans don't pay! See your dealer. For exhaust fan, attic fan, or home cooler circular, write to Robbins & Myers, Inc., Springfield, Ohio—also makers of Electric Motors, Hoists, Cranes, and Moyno Pumps.



R & M De Luxe 10-Inch Oscillating Fan, \$14.95.Other Types from \$3.65.

ROBBINS & MYERS Fail ALL TYPES . ALL SIZES

Chains Get Headache

FCC report attacking exclusive outlet contracts raises specter of regulation cutting revenues.

ALTHOUGH the 750 U.S. radio stations operate under a lengthy set of rules drawn up-and revised from time to time-by the Federal Communications Commission, the three major networks (CBS, NBC, and Mutual) have never been subject to FCC regulation-not at least as chains. The FCC has the power "to make special regulations applicable to radio stations engaged in chain broadeasting," but so far this power has been held in abeyance despite 10 years of clamor against the networks in Congress.

Early in radio history, the networks were criticized for duplicating programs on clear-channel stations at relatively short distances from each other. Later there was an outcry over the networks' acquisition of more and more stations

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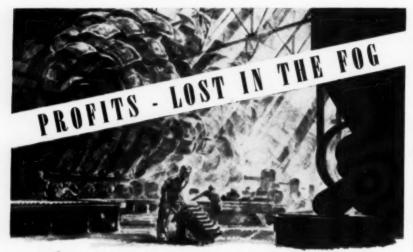
FASTER, FASTER, flow the goods to market. Today, high speed textile machinery accomplishes miracles in the volume, quality, cost and variety of fabrics it creates.

Needed: lubricants for high speed operation, lubricants that prevent spotting of goods, tubricants to match a hundred exacting needs. Texaco has them, together with processing ails that make natural fibres easier to fabricate. More than 2300 Texaco supply points from coast-to-coast make these and other industrial lubricants quickly available on short notice to industrial plants everywhere.

THE TEXAS COMPANY

-in all T 48 States







Send forthis Bookgiving per-emance facts out the univerapplication of attrells in all tior industries.

In the selection of dust collection equipment-or, more specifically, equipment for the collection of fine particles suspended in gases,—the important considerations are, (1) fitness for the purpose or process; (2) low cost of operation; (3) low maintenance cost; (4) sustained efficiency; (5) freedom from obsolescence, and

(6) unequivocal guaranties of performance over long periods. Cottrell Electrical Precipitators and Multiclone Mechanical Collectors have worldwide recognition for meeting all these requirements in all industries with problems in elimination of industrial dust hazards or the recovery of fugitive values, or both,

WESTERN PRECIPITATION CORPORATION 1018 West 9th Street, Los Angeles · 405 Lexington Avenue, New York 140 South Dearborn Street, Chicago

PRECIPITATION COMPANY OF CANADA, LTD.
1010 St. Catherine St., W., Montreal

TRICAL PRECIPITATORS



It takes tough equipment to stand up against consistent wear of abrasive action—and the toughest, most practical abrasive blasting helmet you can buy is the WILLSON Helmet. Comfort for the wearer with adjustable air

supply for normal, easy breathing, gives the WILLSON Helmet the advantage of making it easier for your

No. 31 Willson Abrasive Blassin is one of 300 styles of Goggles, U.S. Bureau of Mines Approved Res-pirators, Helmets, Welding De-vices and other Willson personal protective products designed for every conceivable industrial use and condition.

RESPIRATORS

GAS MASKS

men to turn out better and faster work. WILLSON has been a leader for years in the designing and developing of respiratory devices and maintains one of the best equipped laboratories In America

for scientific research and testing. Why not let WILLSON Safety Service check your safety equipment and problems? No obligation.





INCORPORATED

by outright purchase. Finally some recurrent complaints against the networks airtight contracts with their aifiliatescomplaints that the contracts put the affiliates' best time at the networks' beek and call, and guaranteed the affiliates only a fractional payment for the time sold via their stations.

On March 18, 1938, the FCC which by then had evolved from a mere police force governing technical-electronic matters to a regulatory body with a distinct socio-economic consciousness, bowed to the uproar and decided to investigate the networks. Some 9,000 pages of testimony and 700 exhibits were put forth in the hearings which followed. The networks' minutest affairs were brought to light, and the complaints against themmany of which originated within the industry itself-were fully aired.

FCC Comes Through

The FCC committee which had conducted the hearings then went into a lengthy huddle to prepare a report Washington rumor again and again had it that the committee was virtually overwhelmed by the mass of data at its disposal. The report finally became a sort of ghost ship. But last week it came into port (BW-Jun15'40,p8) -a bulky document bristling with every conceiv able detonation device against the networks (specifically, NBC and CBS) and their policies.

The report asserted that NBC and CBS own more than half the unlimitedtime clear channels; that the 23 stations they own or control (only 3% of the industry) get 12% of the radio industry's entire time sales; that the networks pay these same 23 stations 27.25% of the money earmarked for payment to affiliates; that the 275 other affiliates ge only 27% of what the networks take in that NBC and CBS have a bigger net operating income annually than their entire tangible property is worth.

Evolving Into "Sideline"

Other points: That the networks "freeze" their affiliates' time by options which are never completely used, but which keep the affiliates from joining more than one network simultaneously. that the listing of NBC-RCA and CBS stock on the Exchange causes traffic in ownership without notification to the FCC; that the networks control huge reservoirs of talent, while NBC additionally is a formidable factor in the transcription business; and that the way things are going now, radio is more and more becoming a "sideline" business owned by corporations not primarily engaged in broadcasting.

The report concluded on this emphatic

"The heart of the abuses of chain broadcasting is the network-outlet contract. It is the committee's considered opinion that many of the existing inequities and correctio contract: If net of abuse: network analysis,

Business

organiza trol only their ho other sta accompli pendentl term con dations 1 NBC around 1 ner weel of Sunda ate of t out, year not used by the be sold network.

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CBS

ies and arbitrary practices will find correction in the reformation of these contracts."

If network contracts are the "heart of abuses," they are also the heart of the network business itself. In the last analysis, networks are primarily sales organizations. The networks own or control only 23 of the 350 odd stations on their hookups. They sell time on the other stations without owning them. To accomplish this, they place the independently-owned stations under longterm contracts which demand that the stations will clear time on 28 days' notice. XBC has promises-or options-on around 81 hours of each station's time per weekday if needed, and on 8 hours of Sunday time. CBS options every minute of the stations' time, day in and out, year in and out. All optional time not used by the network may be sold by the station itself-but it dare not he sold to another major competing network.

"Trademarking" Programs

In short, no station may belong to both NBC and CBS-although the Mutual Broadcasting System, a late comer in the network field, has managed to get a number of stations to give it part time, contracts with NBC and CBS to the contrary.

These network contract practices are almost as old as the networks themselves, and they have been-partly by accident and partly by design-responsible for the huge growth in network advertising.

For one thing, since the networks have to keep their schedules straight over a huge domain of facilities not owned by them, the practice of presenting the same program at the same time has arisen. In no small measure this practice has "trademarked" certain programs and worked in their favor. For many years-and to this very day-7 p.m. is the time for Amos 'n' Andy. Thursday, 8 p.m. was Rudy Vallee's spot for 10 years. And so on.

Forced to Succeed

Also, since the networks have to pay for the wire lines linking the stations together (which cost them around \$6,000,000 in 1937), they have made it mandatory that an advertiser use at least 13 weeks of time. Perhaps no other factor in radio has reacted so favorably from the commercial viewpoint as this demand for frequency in advertising. For in making an advertiser buy an extended program series, the networks have literally forced advertisers to be successful by edging them into the position of repeating an advertisement until the law of averages starts to tip in their (the advertisers') favor.

No other medium enforces such success-insuring repetitiveness. Magazines give discounts for multiple inser???????????????????????????????

How much can YOU save?

Get the facts from **IRON FIREMAN**

G. Earl Grindle Got the Facts; Now He's Saving \$27,600 Every Year

There's no need to guess; an Iron Fireman survey of your steam costs will determine accurately your potential savings and betterments. You can bank on an Iron Fireman survey. This survey will cover all factors, from the condition of your boiler plant to your local fuel situation. We will then rest our case with you on the engineering data.

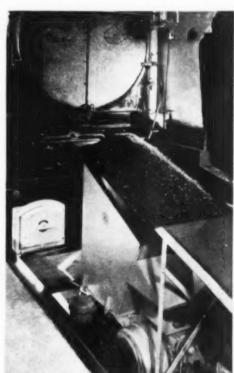
G. Earl Grindle, Chicago realtor who manages property valued at \$6,000,000, wrote recently to thank us for the dozens of surveys we have made for him-in which we have frankly showed where Iron Fireman stokers could and where they could not pay for themselves. We have taken the guess-work out of firing equipment for him.

Mr. Grindle now operates 46 Iron Fireman stokers-and every one is a money-maker . . . his total savings amounting to \$27,600 a year.

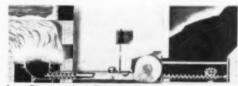
Follow Mr. Grindle's Lead; Ask for a Survey

The thousands of other Iron Fireman users are saving millions of dollars a vear on their fuel bills. Can you afford to waste what they are saving? Follow Mr. Grindle's lead, and get the facts on your own boiler room.

Authorize us now to make an Iron Fireman survey. We will do it at our own expense, and in cooperation with your engineer, fireman or consulting engineer.



Iron Fireman Commercial Heating Stoker, supplying automatically-regulated heat, and burning stoker coal the economical fuel. An independent survey shows that, in number of commercial-industrial installations, Iron Fireman leads the field by nearly three to one



Iron Fireman Coal Flow firing a commercial heating boiler; feeds direct from main coal bunker.



SEND FOR F	

IRON FIREMAN MANUFACTURING CO. Portland, Ore.; Cleveland; Toronto. Mail to 3364 W. 106th St., Cleveland, Ohio.

- See us about making an Iron Fireman Survey, at no obligation to us.

 Send "Modernine, Economise, Iron Fireman-ise."



tions, but they do not require them. In addition, publication contracts are easily abrogated. And it is only recently that newspapers, looking at radio's success stories, have even considered giving discounts for multiple insertions (BW—Mar9'40.p34).

It is quite evident that if for any reason a network's ability to provide time periods on all necessary stations, and for stated intervals, is disturbed, then the network will suffer. Time clearance for extended intervals is the lifeblood of the network. Mutual, which could clear time only after many difficulties, has for this very reason never become a threat to NBC or CBS revenue.

Hence, the FCC committee's frown on network exclusive contracts is no small cause for worry—that is, in the event the committee's report eventually blossoms into some actual regulations. Should the FCC recommend that stations be allowed to join competing networks during those time periods not optioned—or perhaps not actually used—by one network, then confusion may result. Either that, or the first network will be limited as to available time, and its revenue likewise will be limited.

Caught in Rising Costs

It is easy to foresee that a network limited as to time (and hence revenue) will find its sales costs proportionately rising. In short, the sales costs would remain fixed expenses while revenue would drop or remain limited. This possible threat comes atop the already overt threat of American Society of Composers, Authors & Publishers to begin charging networks for the music played over them -a charge which could run into several million dollars annually. Currently, A.S.C.A.P. collects from individual stations. And should the FCC also sponsor higher payment by the networks to their affiliates, then the networks will truly be caught in a cycle of rising costs. How much of this could be passed on to advertisers is a question-and not a very popular one.

These potentialities—and such they will remain until the FCC actually does something with the committee report—are currently commanding the networks' and advertisers' major attention. The Mutual Broadcasting System was only mildly slapped in the report, and is the only network that stands to gain anything by rules of a type recommended in the report. NBC-RCA took a brutal verbal beating, marking the second this spring—the other was on television (BW—Mar30'40.p7). CBS got off a little better than NBC, but not much.

Some surprise was expressed that the American Telephone & Telegraph Co. escaped without even a brush-off. It was rumored that the Committee would blast the A. T. & T. for its line charges, etc., but this did not happen in any manner whatsoever.

LABOR & MANAGEMENT

INDUSTRIAL RELATIONS . PERSONNEL . EXECUTIVE POLICY

Dave Beck's Power Is Challenged

Court grants temporary injunction against teamster unit on plea of wholesale food firm, and holds that employees can't be forced to join union against their will.

Has a union the right to demand that an employer fire workers who refuse to take out a card and hire in their places men supplied by the union, and can it picket and boycott to enforce the claim?

The Superior Court of Washington state passed on these points last week and said "No." S & W Fine Foods, Inc., wholesale grocers, had asked the court for a permanent injunction restraining the Retail Delivery Drivers & Salesmen's Union and a half-dozen affiliated unions (all units of the powerful Dave Beck

Teamster group) from picketing the S & W Seattle headquarters and continuing a tight boycott of the firm's products which has reduced S & W sales in the Seattle territory to zero.

The court granted a temporary injunction against the defendant union, and held—in a written decision—that employees under state and federal laws have the right to decide without interference whether or not they shall join a union

Beck, of course, will appeal. The case is important because: (1) It is the first

The Government "Declares" Peace at General Motors



IT TOOK THE GOVERNMENT'S three crack conciliators, James E. Dewey (left), James W. Fitzpatrick (center), and John R. Steelman (right), as well as three members of the National Advisory Defense Commission working behind the Washington scenes, to end the deadlock in C.I.O.'s negotiations with General Motors; but a tentative agreement was reached this week. Terms as submitted for ratification to 135,000 workers in 53 union locals represent a compromise on the three contro-

versial points which hamstrung negotiators for weeks. Provisions include:
(1) vacations with pay, estimated to cost G.M. a cool \$5,000,000 a year;
(2) a wage increase which will add another \$3,000,000 to the company's payroll but which is substantially less than the 5% increase which the union was demanding as its absolute minimum;
(3) appointment of an umpire to settle disputes arising over interpretation of the contract's clauses—a gain for C.I.O. and an innovation in the industry.

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grious challenge to Beck's power in Seattle since early last year; (2) it is the first move in a Coastwide effort by Beck to take over the wholesale food salesmen and warehousemen in Seattle, Portland, and Los Angeles, and to challenge Harry Bridges' warehouse control in San Francisco; (3) it involves such prominent firms—in addition to S & W—as Western States Grocery, Heinz, General Foods, and Libby, McNeill & Libby, all of which Beck intends to knock over if he wins the S & W case.

The Beck position, which he believes the present U. S. Supreme Court would sustain, if the case ever got that far, is:

1) All federal court labor decisions prior to the Norris-La Guardia Law are obsolete by virtue of that act; (2) Washington state court rulings prior to the state's "Little Norris-La Guardia Act" don't apply.

Nine Recalcitrant Salesmen

In the S & W case, the company's nine Seattle salesmen refused last April to join the union. When Beck charged employers had influenced their decision, Adrian Falk, executive manager of S & W ischooled in the San Francisco labor philosophy, by the way) appeared before the salesmen with union officials present and assured them the company had no interest in their decision. In a secret ballot, supervised by two representatives of the U. S. Department of Labor, the nine men voted unanimously not to sign up.

Then Beck demanded S & W fire the subborn salesmen and hire union members. When Adrian Falk refused, a picket line was thrown around the S & W warehouse and a boycott such as only Beck can command was begun.

The company holds that it isn't engaged in a dispute with any of its employees and therefore the picketing and boycott are illegal. The case now goes to the state supreme court.

Forms of Sway Change

The S & W case spotlights the fact that despite a good deal of wishful thinking to the contrary, Beck is more strongly entrenched in Seattle than ever before, but it's a different kind of dominance.

Bombings and sluggings were frequent in the early days. The florid-faced, blueeyed, roly-poly teamster leader always disclaimed responsibility for such methods, which he was the first to deplore. But, somehow, Seattle business men who failed to fall into line did find their plants wrecked and workers who disobeyed union orders did wake up in the hospital.

The mailed fist is still there and it hurts just as much as ever when it lands, but it doesn't make such an ugly cut on the surface. In short, Dave has demonstrated his power so well that strong arm methods aren't necessary. All he has to do is crack his whip and the opposition usually wilts. In his own words, he has substituted control of buying power for

A message of Appreciation to American Manufacturers

HAT could be more gratifying than the fact that in 1939 alone you placed the U·S·S Symbol of Quality on more than 6,000,000 of the steel products you sold.*

As you profited, so did we. You, through the additional buying appeal this U·S·S seal gave to your products. We, through the splendid support your cooperation gave to the Subsidiaries of United States Steel. This is a merchandising event of no small importance. The advantages and benefits are mutual, as they should be in any planned promotion.

That's why we have so increased our national consumer U·S·S trade-mark advertising for 1940. Through this advertising, additional millions of consumers — from housewives to businessmen — will know that users of U·S·S steels are proud to acknowledge the fact. Here is a promotion properly timed to meet the increasing consumer demand that manufacturers give more facts about the quality of materials in their products.

To any manufacturer whose product is made all or partly from steel, we extend a cordial invitation to write for full particulars regarding the possible application of this label program to his own merchandising need.

Already it is indicated for 1940 that this quantity will be doubled, possibly tripled.



THERE'S "BUY" APPEAL IN THIS SEAL.

Used on miscellaneous steel products, it lends the prestige of a great name in steel to your other quality claims. Seals are also available for Stainless, Copper Steel, Premier Wire, Cyclone Fence, etc. No cost. No red tape. Simply use a U·S·S steel.

d, Chicago and New York

AMERICAN STEEL & WIRE COMPANY, Cleveland, Chicago and New York
CARNEGIE-ILLINOIS STEEL CORPORATION, Pittsburgh and Chicago
COLUMBIA STEEL COMPANY, San Francisco
CYCLONE FENCE COMPANY, Wankegan, Ill.
TENNESSEE COAL, IRON & RAILROAD COMPANY, Birmingham

ENNESSEE COAL, IRON & RAILROAD COMPANY, Birminghau Scully Steel Products Company, Chicago, Warehouse Distributors United States Steel Export Company, New York

UNITED STATES STEEL



usiness Week

MEET THE NEW DAVE BECK—streamlined and smooth. He may impress you as having the best interests of both employers and unions at heart—as intended by his new public relations technique. But he's still head of the Teamsters' Union, and though he wears monogrammed silk shirts that match the color of his sparse blond hair, and pleated blue slacks that match his deep blue eyes, he's just as hard-boiled as ever. Symptom of his new public relations approach is the big signboard that

adorns the roof of Beck headquarters, just outside the center of Seattle. The sign, changed monthly, plugs popular community efforts. Beck headquarters is smartly furnished, completely equipped with the latest in business machines. A teletype in Beck's office connects him with his lieutenants in San Francisco. Los Angeles, and Portland. Signed photos of old friends like F.D.R., Hugh Johnson, and A.F.L. President Bill Green look down on Dave Beck from his office walls.



the strike as a method of enforcing demands and so far it has worked. Union members in each of Seattle's 614 precincts, for instance, are organized into Dave Beck clubs to enforce his boycotts. These units meet frequently to listen to phonograph record speeches by their leader and personal talks by his henchmen.

With the new order of things Beck has adopted a shrewd public relations policy. When eastern Washington apple growers were threatened with disaster last summer from loss of foreign markets, he was among the first to lead a movement to increase domestic consumption. His union actually did increase apple sales enough to win the gratitude of the same farmers who were denouncing Beck a few years

ago for keeping them from hauling their own produce to market.

Beck's public attacks on Communists and fellow travelers have also raised him in Seattle's esteem. In these he is perfectly sincere and they serve the double purpose of advancing his never-ending war on Harry Bridges.

Dave's present position in the community is indicated by the fact that he is a leader of the current Red Cross drive in Seattle, a strong supporter of the local Young Republican Club, and a member of the Seattle committee sponsoring the Moral Re-Armament campaigns.

Beck hasn't allowed his self-assumed civic duties to interfere with his organization work; they have, rather, complemented it. Except for the bus and street railway workers who stubbornly atick to their own unions, he controls everything on wheels that has anything to do with Seattle business. But his rule extends much further than that. He must the dairy industry, for instance, because the creamery workers belong to the same union as the milk wagon drivers.

The laundry and dry cleaning fields are also included in his empire, being run by viceroys of his choosing who regulate everything from wages to the high prices the public is forced to pay.

Retail stores and automobile dealers, likewise are under his thumb.

Incidentally, Beck had the support of most of the stores in organizing their sales people. Some were so afraid of the C.I.O. they were glad to accept Beck as the lesser of two evils.

Dave is by no means content with his empire. He believes that a movement must either advance or go downhill, and he's no backslider. He is advancing on two fronts. First, as always, he is constantly looking for new fields to invade, as in the present case of the wholesale food industry. Secondly, he is always striving to win back ground lost to the C.I.O. along the Coast.

Bridges' Foes Worry

Coast business men don't want to see him deported, because of martyrdom that would result.

THERE IS NO ONE that Pacific Coast business men would rather be rid of than fiery Harry Bridges, California director of the C.I.O. But they don't want him deported. That's why they frown on the bill which passed the House last week. 330 to 42, and which is now before the Senate Labor Committee.

Coast shippers say that such methods as forcible deportation will only play into the Australian labor leader's hands by making him a martyr in the eyes of his men. Last week, for example, Bridges announced a nation-wide campaign to save himself.

After four years of negotiation, employers also say that the maritime chieftain is no longer the "fire-eater" he used to be and that he is at last beginning to understand their point of view. They predict that any change in the Coast waterfront leadership would only bring a new militant faction into power—which would tie things up worse than ever—and shipping leaders would have to go through another period much like the last four years.

The only way to handle Bridges, they feel, is to beat him on his own ground. They point to the fact that Bridges has been slipping badly in recent months—so badly that, until Congress took a hand, business had already begun to speculate as to whom C.I.O. Head John L. Lewis would send to take Bridges place.

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THE COTTON THAT WANTS TO BE

THIRTY YEARS AGO a mechanical cotton picker was announced. 'Pick as much cotton in a day as a dozen men... solve the labor problem'...

Twenty years ago a man developed a cotton picker; claimed that it "kissed" the cotton out of the boll; and a bale of machine-picked cotton would gin 40 pounds of lint more than a bale of hand-picked cotton! . . .

Ten years ago an article in Country Gentleman presented the idea that it might be easier to fit the plant to the machine than to fit the machine to the plant.

For no mechanical picker of the hundreds "perfected" would work on more than a few types of cotton, and there are scores of different types. But discouraged inventors found they hadn't slaved in vain when Country Gentleman put the proper emphasis on the question.

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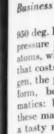
They saw they had gathered a wealth of information that described an ideal plant for the mechanical picker and stripper.

So down at College station, Killough breeds and crossbreeds...down at Lubbock station, Jones is working to produce cotton that will retain its high commercial value yet be suitable for machine harvesting. And it seems that success is in the near future.

This important story of the cotton revolution in Country Gentleman (April, 1940) again proves the unique power of this magazine to move the people of the tremendous business it serves.

Which is the reason why, when your advertising shares this impact in the 2,000,000 most influential rural American homes, it acquires a unique power to move goods.





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PRODUCTION

T.N.T. from Gasoline

Two plants are projected for production of high-explosive intermediates by new process.

THE KNOCK in cheap gasoline is being turned into T.N.T. That, of course, is an oversimplification of what's happening, but two sizable plants for producing high-explosive intermediates from him. grade motor fuel are nearing the brick and mortar stage.

Both plants will be in the Middle West. and should be in full production in less than a year. The contract for the larger establishment (capacity: 1,000,000 lb. of gasoline derivatives a year) will be let soon by a major chemical company. The second plant, somewhat smaller, is projected by a big petroleum company and is trailing by only a few weeks. Universal Oil Products Co., big research and process-licensing outfit in the petroleum industry, is licensing both plants.

Plentiful Material Used

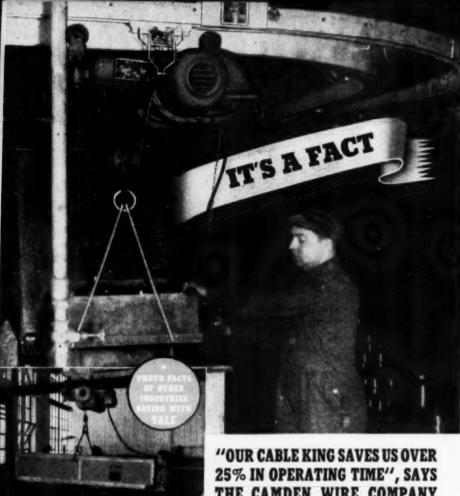
Obviously, the source of the raw material is significant, from the standpoint of both business and national defense. Any old gasoline does it, though the best for the purpose come from Pennsylvania, Mid-Continent, Michigan, East Texas, and Kettleman Hills fields. The intermediates-benzol, toluol, and xylols-have a great many peacetime uses (for making phenol and other industrial chemicals). But for war use, a simple nitration process converts them into highexplosive trinitrotoluol, picric acid, and trinitroxylols.

The principal and none too prolific source of these materials has been the steel industry's coking by-products, and capacity has thus been tied almost directly to the steel production rate. Peacetime price is normally around 30¢ a gal. Recently the material has been hard to find and has commanded prices up to 50¢. In the previous World War it hit 88.

Has Advantage of Simplicity

U. O. P. keeps hunting for ways to produce higher-octane motor fuels. In the course of such a study, its laboratories came up with a process that does the trick of making these scarce intermediates from a plentiful and low-cost material. What's more, the process is so simple that anyone can understand it who passed a sophomore course in organic

In a bubble-tower still, U. O. P. removes from gasoline several of the lowerboiling hydrocarbons: hexane, heptane. octane, and a couple of long-named cousins. All of these are straight-chain paraffins. Passing them over a catalyst at



THE CAMDEN WIRE COMPANY

25% is a lot of time to save. Yet that's the saving effected by The Camden Wire Company through the use of their Cable King Wire Rope Electric Hoist.

Here is an excerpt from their testified statement: "The Yale & Towne Cable King recently purchased has been installed and is doing a fine job. This hoist replaced other mechanical equipment and we figure it saves about 25% out of every hour of the operator's time."

Figure how much time your operators are now consuming for hoisting operations. Cut it by 25%. Now, don't you think it might be worth your while to find out more about the Cable King?

For full information contact your local Yale distributor or write direct.



POWER HOUSE

RUGS

BUILDING MATERIALS

THE YALE & TOWNE MFG. CO. PHILADELPHIA DIVISION, PHILADELPHIA, PA., U. S. A. IN CANADA: ST. CATHARINES, ONT.

Makers of Yale Hand Chain Hoists, Electric Hoists, Electrical Industrial Trucks, Hand Lift Trucks and Skid Platforms

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950 deg. F. at approximately atmospheric pressure strips off some of the hydrogen stoms, which emerge as a by-product gas that costs very little. Without this hydrogen, the paraffins adopt the benzene-ring form, become the corresponding aromatics: benzol, toluol, and xylols. From these materials, it is just a step to brew a tasty mess of T.N.T. for the business end of a H.E. shell. And these intermediates can be turned out on a cost basis competitive with even the peace time price of the by-product coke aromatics.

Shortage of Source Unlikely

The statistical economics are interesting. Gasoline production of the U.S. is always kept under wraps, could be stepped up to almost double the present output merely by letting the industry run full-tilt. Hence there is no conceivable shortage of raw material during the present war. Less than 20% of the present 25,000,000,000 gal, of annual gasoline production would be enough to produce more than 85,000,000,000 lb. of T.N.T. and kindred explosives. It is doubtful whether there are enough guns in all of the world's armies and navies to shoot off this quantity.

The yield of the new U. O. P. aromatization process depends upon the purity of the charging stock put into the catalyzing coil. Charging with pure hexanes and the other desirable ingredients, the process yields 95% of the desired aromatics and the rest in by-product hydrogen and loss. Charging with roughly-fractionated material produces at least 50% of the desired aromatics. Shrinkage in volume is about 25%; in weight, only around 5%.

For the automobile user, the best of the new process is its probable effect on his motor fuel. Because the gasoline fractions most desirable for making high explosives are the knock-creators in an engine, distilling them off definitely steps up the octane rating of the remaining gasoline. Thus the car owner gets a break without additional expense to the cil refiner.

Sunlamps for Crops

Infra-red rays controlled thermostatically to avert freezing and hasten gardens to maturity.

Now the farmer or gentleman gardener can turn on his infra-red anti-freezing equipment and go to the movies confident that when he gets home he won't find his crops or garden damaged by low temperatures.

The Smoot-Holman Co., Inglewood, Calif., claims to have developed thermostatically-controlled equipment which applies infra-red irradiation to orchards and ground crops, preventing damage from freezing, and bringing them to maturity weeks earlier than normal.

The method, known as the Bashore



MINIMIZES FRICTIONAL WEAR ON ALL YALE CHAIN

The world's best chain is now better! A new secret plating process developed by Yale makes it so.

Corresponding in a general way to the cadmium plating common to the automobile industry, the secret of this process lies in the final dehydrogenation. Yale has perfected a means of performing this final step in a way which maintains the physical and chemical properties of the steel.

Chain treated with this process—and only such chain—has an impervious finish so satin smooth that frictional wear is reduced to a new minimum. This means less operating effort. As for rust-Yale's new coating makes it practically impossible!

Ask your distributor to show you secret processed Yale Chain. It's the latest hoist advance!

THE YALE & TOWNE MFG. CO.

PHILADELPHIA DIVISION, PHILADELPHIA, PA., U.S. A. IN CANADA: ST. CATHARINES, ONT.

> Makers of Yale Hand Chain Hoists. Electric Hoists, Electrical Industrial Trucks, Hand Lift Trucks and Skid Platforms,

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BUSINESS PAPER SELECTING AND BUYING NEED NO LONGER BE DIFFICULT. THIS GUIDE INSTANTLY GIVES YOU FULL DATA ON AND PROVEN USES OF BONDS, LEDGERS, THIN PAPERS AND INDEX BRISTOL AND PROVIDES A FUND OF INFORMATION AS TO WEIGHTS, SIZES, COLORS AND FINISHES.

NO OFFICE WHERE BUSINESS PAPERS ARE BOUGHT SHOULD BE WITH-OUT THIS HANDY GUIDE THAT FITS ANY 8½ X 11 FILE. YOUR FREE COPY IS READY FOR MAILING. JUST FILL IN THE COUPON.

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Manufacturers of Fine Rag Content Bonds, Ledgers, Index and Lightweights

Process, consists of infra-red reflectors strung on overhead wires and controlled by a central distribution panel. It doesn't raise the air temperature in grove or field, but provides irradiation which keeps the sap flowing in leaves, tendrils, stems, and branches.

Satisfactory installations are said to have been made on oranges, lemons, grapefruit, plums, pears, peaches, almonds, avocadoes, tomatoes, berries, beans, peas, lettuce, artichokes, melons, dahlias, sweet peas, camellias, begonias, and ferns.

Equipment can be installed at about \$210 per acre and, where operations are conducted on a 2¢ per kilowatt-hour rate, operating costs run 15¢ per acre per hour. Smudging costs about 60¢ per acre per hour.

Set at a specific "on" temperature, the thermostatic control "kicks in" at the switch and kicks out again when the atmospheric temperature rises above the danger mark.

New Plastic Mixture

Soybean research yields a solution already being used in textiles, paper, and leather.

In 1936 the United States Department of Agriculture established a regional soybean industrial products laboratory at the University of Illinois, set it the task of finding some practical uses. Up to then, about the only applications in industry were paints, especially barn paint, and the much-discussed Ford products: automobile paint, and a plastic which contained twice as much phenolic resin as it contained soybean meal.

A promising non-food use for soybean meal seemed to lie in plastics. The key discovery was that protein from soybean meal could be hardened by a 40% formaldehyde solution into a thermoplastic material. It was industrially useless, because it took too long to mold, and absorbed too much water when submerged. But it was a start.

A Cheaper Mix Produced

Soybean meal from which the oil has been extracted is much cheaper than the pure protein. Presently the researchers learned that the meal itself could be treated successfully with formaldehyde. Adding a phenolic resin or urea resin to hardened meal made it a quick-setting plastic. Molding together equal parts of the hardened meal, woodflour, and resin produced a distinctly new and homogeneous plastic material.

This mix is about 15% cheaper than the ordinary resin-and-woodflour product, and it can be made to brighter dye shades without weakening the material. Disadvantage: It still absorbs 3% water in a 48-hour submersion, which is six times as much as phenolic material ab-

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F-M for Police Cars



Frequency-modulation broadcasting, 0.K.'d for commercial operation after Jan. 1, continues to find new applications. In Douglas County, Neb., a two-way f-m communication system will soon go into operation, between the sheriff's office in Omaha, and police patrol cars fitted out with transmitters and receivers like this General Electric test car.

sorbs. But already a lot of manufacturers are ankle-deep in tests, with every indication that several of them will soon be employing it in various products, chiefly for decorative work.

For Finishing and Sizing

Routine question that arises about every plastic: Has it a liquid form? The laboratory found that as much as 10% of soybean protein could be suspended in a formaldehyde solution. When this solution is applied to a material and dried, the residue is practically the same plastic. Used to impregnate paper, cloth, or other fibrous material, it can be partially dried and then hot-pressed into a strong, lustrous laminated board, in a broad range of bright or dark shades.

The same solution is already being used in textiles, paper, and leather. As a leather finish, it produces a tough, flexible coating. One large tanner is using it to produce a premium grade of men's-shoe weight calfskin. Several paper mills use it as a water-resistant sizing. In a textile it produces a semi-permanent stiffening that resists several launderings.

At least two big soybean processors, The Glidden Co. of Chicago and the Central Soya Co. of Decatur, Ind., are promoting the use of this liquid material commercially, and are reported to be developing industrial uses along several related lines.

AIR CONDITIONING Can increase your Profits



If you own or operate any business dealing with the public—if you have an office with a number of employees, here is vital news for you!

Your Frigidaire air conditioning dealer has an exclusive method of determining in advance whether air conditioning can increase your profits, showing you in dollars and cents how much increase you can reasonably expect, and how much the equipment will cost to own and operate.

It should easily be worth 15 minutes of your time to find out once and for all whether air conditioning is a profitable investment, not for John Jones around the corner—but for you! See nearest Frigidaire Air Conditioning dealer, or write Frigidaire Commercial and Air Conditioning Division, Dayton, Ohio.

Frigidaire

Unit Air Conditioners
Sace on Space, Installation Costs,

These economical units cool, dehumidify, filter and circulate the air. Can be readily equipped for heating and ventilating. Arequickly installed and easily moved. Take up a minimum of floor space. Fxtremely economical to operate. In-

Frigidaire products include—Unit Package and Central System Air Conditioners, Refrigeration equipment for display cases, walk-in and reach-in coolers, Water Coolers, Beverage Coolers, Ice Cream Cabinets, Frosted Food Merchandisers, and Milk Coolers.

Business

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● Hundreds of products—rrom oil burners to set screws—now are being handled and shipped faster and more economically because of shipping pack recommendations made by the General

Box Laboratory staff.

These highly trained and experienced technicians are thoroughly familiar with all modern shipping procedures. They are helping manufacturers make important savings; by lowering tare weight, avoiding the use of unnecessary materials, providing for faster handling and packing, and by eliminating practically all damage claims.

ARE YOU SURE OF MINIMUM SHIPPING COSTS?

Why not be sure that your products have the advantages of minimum shipping costs plus maximum protection? There is a General Box engineer located near you. Ask to have him call, or just mail the coupon for complete information. There is no obligation.

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NEW PRODUCTS

Casting Rod Case

THE PROTECTUROD, designed to give "bank-vault protection for a casting rod," weighs less than two pounds, yet is strong enough to withstand a half-ton



pressure. Protecturod Co., 4033 Windsor Rd., Youngstown, O., welds it electrically out of cold-rolled steel, plates it with chromium, adds a hermetically sealed cap.

Glareless Index Tabs

IF GLARE from shiny index tabs bothers the eyes, try the new S. S. (satin surfaced) Transparent Tabs developed by Cel-U-Dex Corp., 1 Main St., Brooklyn. They come in three sizes and eight colors.

Photo Tracing Cloth

WITH A CONTACT photoprinting outfit and Heccotex, a sensitized, non-shrinking, non-stretching linen, developed by Hunter Electro-Copyist, Inc., Syracuse, N. Y., accurate tracings of penciled engraving drawings may be made without ink tracing by hand. Old worn-out ink tracings can be reproduced with the same material. Additions may be made in ink.

Constant Groove Speed

Secret of the ability of Recordall Recording Units to capture 45 minutes of speech on a single 13½-in. disk record—by one speaker or a conference group—is a palented system of "constant groove speed" recording. Recordall Mfg. Co., 2625 Santa Fe Ave., Los Angeles, produces them in various models for recording two-way telephone conversations, speeches, concerts, theatricals, radio programs.

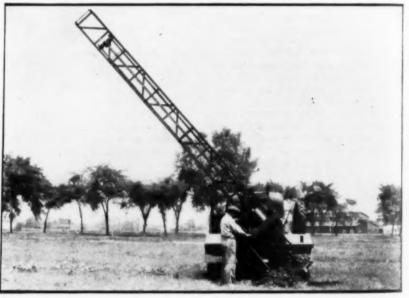
Sani-Fogg

Whenever it is necessary to atomize disinfectants, antisepties, or insect sprays in large rooms, the Sani-Fogg comes in handy. Brown Corp., Lincoln and Bellevue Aves., Syracuse, N. Y., builds it with an electric-motor-driven turbine fan and two spray nozzles, mounts it on a cart.

Industrial Cosmetics

Some while Ago, Millburn Co., 905 Henry St., Detroit, brought out Ply No. 1, a vanishing cream for protecting the skin of the hands against dirty grease

New Drills for the Army



The Buda Co., Harvey, Ill., engine manufacturer, started delivery last week on a U.S. Army order for a new kind of earth drill. Mounted on trucks, the drills are designed for use by a fast-moving army—for such jobs as laying land mines and build-

ing tank traps. They are able to dig holes 50 ft. deep, and 42 inches in diameter; and in ordinary soil or soft rock, they'll dig a hole six ft. deep. and 20 inches in diameter, in three minutes. They can work at any angle up to 45 degrees. and oil, paint, asphalt, tar, printing ink, etc. It has now followed up with Ply No. 2, a cream for protection against cutting compounds and cooling lubricants used on machine tools, and Ply No. 6, an ointment for protection against several acids.

Photo-Electric Phonograph

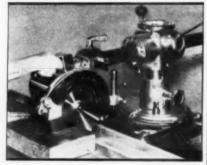
Newest development of Philo Corp., Philadelphia, is the Philo Photo-Electric Phonograph. It has no ordinary "needle," but a "sapphire jewel which floats through grooves on the record, transmit-



ting the tone vibration to a tiny mirror swinging freely on an axis. A beam of light, produced by a small bulb and directed at this vibrating mirror, picks up the vibrations and reflects them on a photo-electric cell. The cell, activated by the vibrating lightbeam, converts these vibrations electrically into music."

Versatile Saw Unit

Many operations can be handled efficiently with an electric hand saw; many others call for a radial saw. Therefore,



Porter-Cable Machine Co., Syracuse, N. Y., is bringing out the Speedmatic Saw and Radial Arm Unit which gives a builder or maintenance man both types of tools, along with a work table. The new radial arm takes the standard Speedmatic electric hand saw.

Luminescent Switchplate

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Inter-Office Memorandum

Business Week

10: The Editor

SUBJECT: The Economic Consequences of a German Peace

FROM: Staff Economist

DATE: June 18, 1940

For some months, our Economics Staff has been engaged in a continuing appraisal of the economic consequences of a decision in the European conflict. When this job was started, Norway had not been invaded and military experts still thought in terms of a long-drawn-out war in which the purchasing power of the Allies in this country would ultimately outweigh the initial military superiority of blockaded Germany. But this week, in which France has capitulated, a sense of realism suggests that our discussion be focused on a full exploration of just one of the alternatives. The German blitzkrieg has forced American business men to turn their immediate attention to analyzing what a peace made in Germany may mean to the United States. The main points of such an analysis, which have been outlined in previous memos, are developed at length in this one.

Already we have a foretaste of things to come; already Congress has added billions to the national defense budget. In the coming fiscal year the nation will spend more than \$4,000,000,000 on armaments, if our industrial plant can turn out that volume. That represents only 5% to 6% of the national income, and by current German or British standards is small. But in the fiscal year that begins July 1, 1941, we can be sure that the defense bill will go up considerably—possibly to as much as \$10,000,000,000 — for by that time our factories presumably will have developed mass production techniques for airplanes, tanks, armored cars, and munitions.

Under the impact of a \$10,000,000,000 arms program, our national income might rise to around \$80,000,000,000 — possibly more; 12% of the national energies would be going into developing our Army and a two-ocean Navy. Out of every eight hours worked, one hour would go for armaments; one out of every eight tons of agricultural or mineral products would be a contribution to the upkeep of the Army and the Navy; one out of every eight dollars of maintenance, depreciation, and depletion of our plant and our natural resources would be properly chargeable to Hitler.

Nor is that all. No allowance has been made for building new plants or chang-

ing over existing facilities to arms production — unless that cost is directly taken care of by government expenditures; no allowance has been made for the diversion of man-power from factories to army camps and naval training ships to learn the art of combat — a learning which has no permanent economic value, which in and of itself is non-productive. And, of course, no allowance could possibly be made for the loss of personal and economic liberties which undoubtedly will accompany a major rearmament effort.

Since the United States has a higher standard of living to begin with, the burden of armament will be felt here more than it has been in Germany — even though the absolute percentage of national energies devoted to arms may be greater in Germany than in the United States. During the last six years the Germans have diverted 25% to 40% of the country's productive effort to arms. After a victory, Hitler would probably lower the percentage. And because it would mean greater leisure or greater goods available for creature comforts, any reduction would have the effect of raising the German standard of living. But in the United States, a gigantic arms effort will have the contrary effect.

In making such an effort, we shall all have to chip in to pay the bill. If we paid it out of taxes as we went along, then the total federal levy for armament alone would amount to 12% of the national income; individual and corporation income and surtax rates would perforce increase; excise taxes would rise; and the Treasury would start scouting about for new sources of internal revenue. One way or another the government would levy a toll of one-eighth on everything produced. The consequence would be deflation of individual purchasing power and corporate profits.

Even if Congress decided to defer the cost to posterity, the current generation would still have to pay it indirectly. Borrowing the money would not alter the fact that 12% of the nation's energies were going into ordnance — airplanes, tanks, shells, uniforms. Only 88% of the national output would consist of ordinary peacetime goods — food, apparel, home furnishings, as well as houses, factories, and machinery for industrial purposes. So money paid out for total production would exceed the output of year-in and year-out purchasable goods. Therefore, demand (money available for purchases) would exceed the supply of merchandise available for sale and prices would ultimately rise.* Thus there would be an indirect tax on all income — the "inflation" touch.

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^{*}Since the government would be borrowing the money to pay for armaments, instead of collecting it in taxes, all workers and all corporations would receive full pay for their production or 100%. For every unit of output, there would

Inflation, however, is not automatic or mathematical in its action. It summes, in this case, that government expenditures have a galvanic effect—
Let corporations reinvest their earnings in new plant and machinery, that investors their interest and dividend checks to embark on new ventures. In such a squence employment would increase and the national income expand. The very diverson of a large part of the country's energies to armaments would act to stimulate coduction of consumers' goods; for activity in the heavy goods industries would have to lift business in general.

Yet not until we had virtually full employment of the nation's man-power adplant capacity would inflation really start; for, while some of the nation's sources were still unused, it would be possible to produce additional goods, at this additional production would tend to hold prices in check."

But what if Hitler chose to disengage German workers and industries from ms production and put them to work on peacetime goods, instead of entering an ms race with this country? Would the American standard of living be affected men? Would it not be possible for business to go on in this country as usual? Would not Germany be our biggest customer instead of England? Would not that be me main difference?

President Roosevelt provided the answer to these questions in his address to the graduating class of the University of Virginia on June 10, when he pledged full-speed ahead to the Allies — "the opponents of force." In thus turning his tack on Hitler and Mussolini, Mr. Roosevelt made it clear that he does not expect the political or economic relations of the United States with either Germany or Chaly to be amicable immediately after the war. And Mr. Roosevelt's choice of words denounce the dictators was no accident.

A victorious Germany must be a powerful economic and political competitor of the United States. For Germany has a weapon no industrialized nation in the world has ever before possessed: statewide industrial coordination. Just as it launched werwhelming resources of airplanes and tanks against the French and British armies,

the an equivalent payment for wages, salaries, interest, dividends, and profits, without a deduction for taxes for armaments. But because 12% of the national moductive effort was going into armaments, "peaceful" production would amount to only 88%. So — the supply of money = 100%; the supply of purchasable combidities = 88%; and there would be — theoretically — an inflation amounting to 3.6%.

^{*}There is another possibility. After a time arms output would approach a mak; the capital goods industries would cease to expand. And national defense, is the primer of the economic pump, would lose its effect. From that point on, the larder people worked to produce arms, the less there would be — proportionately — to consume. The nation's standard of living would be under pressure.

so Germany might attempt to launch an economic blitzkrieg against the United States for world markets.

In years to come, German economists, with their tremendous capacity for taking the world view, may try to explain such an economic struggle between the United States and the new Germany as the fifth phase of a logical economic evolutionary process, following this sequence:

First phase: Man does everything for himself — fashions his own tools, hunts for food, defends himself.

Second phase: Individuals develop special skills and specialize — the shoe-maker, the hunter, the blacksmith.

Third phase: The division of labor develops into the factory system — one man cuts cloth, another sews seams, a third puts on buttons, and so on.

Fourth phase: The Industrial Revolution. Machines supplant manual labor. Great corporations gradually replace individual proprietorships in industries requiring huge aggregations of capital.

Fifth phase: The state takes over. Instead of many business managers and owners making individual decisions in their own self-interest, the government directs all industrial effort — allots raw materials, determines output, sets hours of labor, and fixes prices. Coordinated economic planning succeeds the free market as the "automatic equilibrator" between supply and demand; competition between corporations and proprietorships ceases and the "wastes of private competition" are thereby ended.

And study of that pattern must already have led Nazi economists to the conclusion that in a competitive fight for world trade Germany must inevitably win out over the United States. For German industry is in the last stage of economic evolution, whereas the United States is still to be in the fourth and assertedly less efficient stage.

This theory of economic evolution should not be dismissed as an economist's pipe dream. We must remember that, in the past, Germany industry has been able to cope on equal terms with American industry in all but one factor: control of cheap and readily available sources of raw materials. In industrial techniques, in inventiveness, in skilled workers, Germany has seldom lagged far behind the United States.

But Germany has been constrained to depend on other countries for vital mineral and agricultural resources; and in recent years, lacking sufficient foreign exchange to obtain supplies, the Germans have resorted to autarchy — economic self-

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sufficiency — involving substitute products which usually have been more expensive and frequently less satisfactory than such natural resources as rubber, wool, oil, and many of the metals.

After a victory over France and England, raw materials in plenteous quantities would be Germany's for the taking. German industry would have virtual natural-resource equality with the United States. And this country's industry would be up against a new kind of "all-out competition."

With all German industry under his thumb, Hitler could count on being able to direct it ruthlessly toward a pre-determined end — toward, let us say, the capture, cost what it may, of foreign markets.

To obtain a foothold in South America, as an instance, Hitler might offer German-made automobiles under the prices of American companies. And since he has no dividends to pay, no stockholders to satisfy with quarterly accountings of profits and losses, he can cut and cut. Even if General Motors, or Ford, or Chrysler could turn out automobiles more efficiently than German manufacturers, even if it required fewer man-hours to make an American car, they have never before faced the competition of a national government. Private companies cannot fix by fiat the hours or wages of labor.

If this goes for automobiles, it likewise goes for a great many manufactured products which this country has customarily sold throughout the world — business machines, farm implements, machine tools, etc. If we are going to consider all eventualities, we must consider this one: That, unless the United States government subsidized American exports, Hitler's loss-leader policy would prevail. For American corporations are necessarily in business for private profit. They could not remain in business very long patriotically trying to hold on to an export market.

Strangely, a loss-leader policy would not necessarily cause hardship in Germany. Since in recent years a substantial proportion of German energies has gone into arms output, any diversion to peacetime production must be an addition to consumer income. Time and effort diverted from munitions to automobiles which, in turn, are swapped for Brazilian coffee would be a clear gain to German consumers.*

Conceivably, Hitler might use such a loss-leader policy to invade domestic markets — to sell, say, automobiles marked "made in Germany" in the United States.

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^{*}Ironically, munitions can be used in the same way to lift the German standard of living; witness the deal just made between Turkey and Germany: Turkey gets armaments, Germany tobacco. This type of trade — munitions for goods — also tends to bring countries within Germany's military orbit. For if German factories make the original arms equipment, they may also make the replacements.

That would be the crowning indignity — offering over here the product in which this nation has established such clear-cut world supremacy. Such an effort would compet the United States to raise tariffs or establish import embargoes against German products (BW—May25'40,pl3).

If such competition prevails, American industry, to operate at a profit, would be squeezed within the confines of its own borders, enlarged perhaps by Canada and such parts of Central and South America as could be drawn into a Pan-American economic bloc. To paraphrase the President, the United States would tend to become a lone island in a world dominated by a philosophy of industrial coordination.

To meet a victorious Hitler in either an arms race or in such a trade war as has been outlined, we may be forced to adopt some of the totalitarian ways of doing things; we may have to sacrifice some of the notions we have held about the rights of private property owners to dispose of their property as they see fit; we may, in the interest of society at large, have to put a halter on individual liberty.

Because:

- (1) If Hitler embarks on a large-scale arms-building program, this country would have to match him plane for plane, ship for ship, cannon for cannon. To carry out such an undertaking would be tantamount to a major war effort. Increasing control of the production line from Washington would be inevitable.
- against the United States in world markets, then managers and owners of private property would probably find it desirable in self-interest to coordinate their efforts and plan production to meet the threat of Greater Germany; and presumably this would be done with legal benedictions from the government. In fact, the government might actually develop a program already foreshadowed in Washington for systematic subsidization of exports to key markets, presumably to South America, or for developing a series of exclusive inter-American trade agreements. The purpose would be two-fold: (1) to widen American political and economic control in the western hemisphere; (2) to keep Hitler out. These measures would by their very nature enlarge the government's sphere of influence over private business.

But things besides guns and U. S. government subsidies to industry can stop Hitler and, having given realistic consideration to the bleakest possibilities for this country, we should examine the problems ahead for Hitler.

After the war the German nation may be played out. Hitler, victorious, may be compelled to let his people relax and indulge themselves in some of the fruits of victory — the consumer goods that the Germans have been forced to do without for

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so long — butter, eggs, fruits, and all kinds of creature comforts. That policy would diminish the competition he would have to offer in world markets. For the more the German people refuse to do without, the less Hitler will be able to dump on the rest of the world.*

Further, Hitler might not be able to assimilate, organize, and coordinate his conquests. Even if he did not attempt to incorporate the conquered realms into a Greater Germany, even if he only aimed at making Berlin the economic nerve-center for a vast Federation of European States, there must still be problems, because:

- (1) The populations of the states to be made vassals speak various languages, use different legal forms, have diverse customs, possess widely differing temperaments, and might take unreadily to German industrial and agricultural techniques. Coalition of such diffuse ethnological and environmental backgrounds overnight is impossible. It would take years to make efficient Germans out of Poles, Czechs, Belgians, or Frenchmen if it could be done at all.
- (2) The conquered certainly would not always love the conquerors. There would be sabotage, and passive resistance, and at times outright revolt. Hitler would have to maintain a vast standing army to keep down popular uprisings against his rule. This policing force would live off the conquered, it is true; but its very existence would cut down the operating efficiency of the Reich's enlarged industrial machine. The support of such an army must come out of production and for Germany this would be a fixed cost that this country, for instance, would not have.

And even if all should go smoothly in fusing the natures of the people in the conquered lands, it must take Hitler months to convert his munition plants over to peacetime industrial pursuits, years to rehabilitate German factories, machines, and railroads after the unremitting grind of a maximum war effort; and during that period of changeover and repairs, the United States would be preparing its plants for large-scale arms production for national defense. So, when the time came for meeting Hitler's competition we would be ready to deploy our industrial energies for either peace or war production, whichever was most urgent.

There are political and social problems ahead of Hitler, too. How will the

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^{*}If the German people continued on a pinched war diet, then Hitler could convert the full production of his arms factories to the task of gaining control of world markets; he could use his manufactured goods to get raw materials and with those raw materials turn out more manufactured goods for sale abroad, thus pyramiding the force of his competition. But if, with a victory, the German people demanded a higher standard of living, then Hitler would have to use his industrial plant to produce comfort goods for home consumption or to produce manufactured goods which would be exchanged abroad for consumption goods. This would cut down on the production available for export at low prices.

German people react when they learn the cost of the victory in terms of human life? Will Mussolini get along with Hitler after the war? Will there be a military and naval struggle for the rich rubber, oil, and tin resources of the Netherlands East Indies, possibly involving Japan? Will the German people demand greater political freedom and greater economic rewards after the war emergency passes, thus curtailing Hitler's power to act as he pleases in world markets? Will the economic plight of Europe be so desperate after the war — particularly as to foodstuffs — as indefinitely to postpone serious industrial competition from Hitler, and perhaps even force Hitler and other European rulers to call on the United States to relieve shortages? Will Hitler get involved in war with Russia? And will Hitler, by the extension of his realm, have bitten off more than he can efficiently chew? These are questions that must be answered in the wake of a victory.

Of only one post-war consequence can we be certain: After a Hitler victory more and more of this nation's industrial energies will go into building an efficient Army and a two-ocean Navy. Inevitably taxes will tend to rise; inevitably there will be a downward pressure on the domestic standard of living and on business profits.

Of a second consequence we can feel reasonably sure: Over the long-term, the struggle for supremacy in world markets between American industry and German industry will force an issue between (1) totalitarian economics, in which the state establishes output, hours and wages of labor, and prices, and (2) capitalistic economics, in which individual owners of plants and mines decide how much to produce, wages and hours of labor are arrived at by bargaining, and prices are determined in the so-called "free market."

A third and general conclusion seems warranted. A victory for Hitler will harden the economic row the United States has to hoe.

However, before any such intense competition between the German state and American industry gets under way, this country can have a substantial recovery — based primarily on the current defense program, which is being financed in large part out of deficits. For not until our armament absorbs a much larger percentage of the national income than it now does, and taxes increase accordingly, will the impact be sharply deflationary.

Thus the analysis of the economic consequences of a German peace ends on this anomaly. Over the long term a victory for Hitler poses numerous economic, political, social, and competitive problems. But over the short term, it prompts this nation to re-arm rapidly, and that tends to stimulate the capital goods industries and business as a whole.

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NATIONAL DEFENSE

Labor Army Marshaled for Defense

Hillman tackles job of providing adequate manpower for the vital industries; Social Security files being used in lining up nation's skilled workers.

hy Friday, May 31, the Defense Advisgy Commission held its first meeting with the President; six out of the seven members were in attendance.

Last week, the seventh member, fully recovered from an attack of grippe, went to work in his office on the second floor of the Federal Reserve Building, just down the hall from the offices of Industry Coordinator Knudsen and Raw Materials Coordinator Stettinius.

This week, despite the delay caused by his illness, Labor Coordinator Hillman had in full swing the job of developing and making available a supply of skilled labor equal to the needs of the country's defense program. Workmen were still installing telephone extensions and moving in desks and filing cabinets, but already the job had been advanced beyond the rough-draft stage to a point where Hillman and his colleagues, as well as outside observers, could take a good square look at the blueprints and evaluate them in learns of their workability.

In some ways, Sidney Hillman has the toughest of the Defense Commission jobs. The factors with which he must deal are not the rigid specifications of armor plate, nor the timed speed of the assembly line. He must deal with imponderables in the human equation; his problem is men. More specifically, it's skilled labor. To solve it, he must focus the activities of half a dozen scattered government agencies on three knotty questions: How many skilled laborers do we have? How many more do we need? How will we get them?

Applicants' Claims Tested

The Social Security Board is at work on determining how many skilled workers are immediately available. Every worker who applies for unemployment compensation must register at one of 4,500 State Employment Service offices. Under SSB direction, trained interviewers take his work history, verify his statements by scientific tests, send the data on to Washington. Last week, SSB was collecting and collating these reports from the state services, and preliminary figures on the number, location, and occupation of skilled workers available for jobs had been compiled for 33 states. Generally, the figures on the supply were encouraging, although such important states as

New York and California were still unreported.

Partial totals showed that there were available 23,000 men registered as technicians, 657,000 as skilled craftsmen, and 858,000 as semi-skilled production workers; 4,953 occupations were represented. Of this group 5,300 were listed as tool and die makers, more than 2,300 showed experience as engineers and designers, approximately 2,000 claimed experience in skilled jobs in aircraft, shipbuilding, munitions, machine shop, and machine tool industries, and more than 17,000 qualified as machinists and mechanics. The survey further revealed that among these employment office applicants, there were more than 2,100 workers who offered experience in 13 selected shipbuilding occupations, approximately 1,500 as aircraft workers in 20 selected occupations, and more than 23,000 in a group of 33 machine shop and key manufacturing occupations.

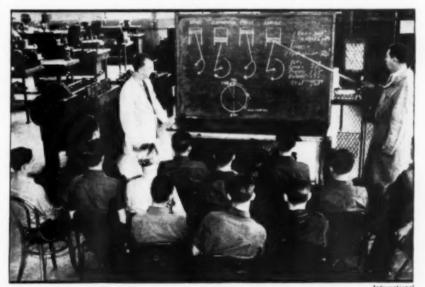
There is, of course, one great question mark hovering over SSB figures. Can a manufacturer rely on its classifications? Can be be sure that a man whom the board lists as a tool and die maker is really competent in his craft—that he had adequate training and hasn't got rusty? Social Security Board experts say yes—unequivocally. They cite a record of over 3,500,000 placements in 1939 of which nearly one-third of a million were in skilled crafts, claim better than 90% accuracy in job classification as tested by actual success at assigned jobs.

Break for the Middle-Aged

SSB's preliminary figures show that more than one-third of skilled job-seekers are over 45 years of age. Thus one result of increasing industrial activity under a defense program is readily predictable. There will be a substantial re-employment of the middle-aged worker. In this connection the SSB reports that many Chicago metal working employers have raised their hiring age limit from 40 to 50, and the Civil Service Commission is hiring people for navy yard jobs who have reached the retirement age.

The Department of Labor's Bureau of Labor Statistics has the job of answering the question: How many skilled workers will production for defense require? Commissioner Isador Lubin and his staff analyze each appropriation bill that Congress passes, calculate the number of man-hours needed to produce every tank and battleship that Congress provides. They divide the man-hours into occupational groups, arrive at scientific estimates of the number of different craftsmen which the defense program will employ. Lubin checks his figures with the War and Navy Departments and sends them to Hillman.

Several federal agencies are now addressing themselves to the problem of providing skilled workers for key defense plants. They are the Social Security



To meet the demands of the national defense program, more and more CCC boys are being trained as skilled and semi-skilled auto mechanics. About 11,000 are now learning to be truck and tractor drivers, welders, machine operators, and repair men. Above, studying cylinders.

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The Associated **Business Papers**

HALL-MARKS OF





Board, National Youth Administration, Works Projects Administration, the Office of Education, and the Federal Committee on Apprenticeship. Some are equipped for immediate aid; others will be lapful in the short run; the rest must plan for the long haul.

Labor Mobility Necessary

The Employment Service Division of the SSB is informed by the War and Navy Departments as contracts are let Its job is to make available to munpanies that get government contract- information on the number of skilled work. ers unemployed in the locality of their plants. If the companies are unable to satisfy their labor demand from the supply at hand, a request for more data on available workers of the skill needed is referred to a clearance agency which canvasses the files of all employment offices in the state. If a job cannot be filled from the state's surplus, the request is cleared through Washington, which rontacts other states for the worker needed

Big barrier to the Employment Service's efficient functioning is the disinclination of labor to move from one community to another. Plans are afoot to make workers more mobile. Inducements suggested are government payment of transportation, Housing Authority's providing homes.

Although the Employment Service has had some occasion before to provide national clearance on difficult job requests. there are no precedents for coordinating the placement work of 48 state agencies on the scale that defense production seems to require. The blueprints for the new job are apparently carefully prepared, but the ability of the bureau to translate them into reality is largely untested. The SSB's record of competent administration suggests however that there will be a minimum of fumbling.

For Pre-Apprentice Training

NYA is all set to expand the extensive program of shop, metal, and construction work training in which, for years, it has sought to teach young men the fundamentals of basic crafts. Its aim is to provide 450,006 youth with mechanical skills. Already it is shifting as many NYA workers as possible into mechanical projects, expects a Congressional appropriation to complete the job. Mechanical ability tests administered to 13,638 young men working in 590 shops in 43 states showed that 6,466, close to 50%. had marked aptitudes for various skilled jobs. Encouraged by the results, NYA will test all workers on mechanical projects, confidently predicts the discovery of a vast, untapped reservoir of quickly trainable skilled workers. NYA's optimism is widely discounted, however, and its usefulness for anything more ambitious than simple pre-apprentice training is dubious.

Paralleling NYA's expansion of its mechanical projects program, WPA has made similar work re Business coop rat ers, since was con offers of ery, valu ever, as ment sla ers-W lands o worker. raining claims 1 into vo necks d

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similar shift in emphasis-away from work relief and toward work training. Rusiness has shown a significant spirit of cooperation; WPA reports that employers, since the national defense program was conceived, have come forward with offers of surplus or semi-obsolete machinery, valuable for training purposes. However, as industry takes up the unemployment slack-particularly of skilled workers-WPA is likely to have left on its hands only the hard-to-train unskilled worker. CCC is primarily concerned with training for behind-the-lines Army jobs, daims to be able to convert its program into vocational education if labor bottlenecks develop.

Education Falls in Line

The federal Office of Education approaches training for national defense from three angles: (1) through the use of existing public trade-school facilities, (2) through expansion of facilities requiring capital investment, (3) through engineering schools.

In every state and every county the federal government cooperates with state educational agencies in a program of vocational education. At the present time there are enrolled in this program more than 2,000,000 students, most of whom are between the ages of 16 and 30. There are 53,500 teachers of vocational education, and nearly 45,000 others are attending training courses in preparation for such teaching. Already, about 15,000 teachers are conducting courses in trades and occupations which are of special importance in a program of national defense. Among these key trades are aircraft mechanics, machinists, auto mechanics, sheet metal workers, welders, cabinet makers, pattern makers, electricians, and blacksmiths. This aspect of the program serves more than 700,000 students.

Trade Schools Expanded

States and local communities have invested approximately \$1,000,000,000,000 in buildings and equipment for technical schools of less than college grade and it is the utilization of this huge plant which is being expanded. The Commissioner of Education's program calls for (a) expansion of the present program of full-time day courses for youth and evening extension courses for employed workers; (b) the re-training of unemployed adults, many of whom have had excellent occupational experience; (c) the development of short, intensive training courses for out-of-school youth.

It is planned to run the trade schools through the summer and to add extra shifts in order to increase the number of trained men. Already some vocational schools are running on a full 24-hour-aday basis. The Office of Education is asking for an appropriation of \$50,000,000 to expand these facilities.

Another government agency working



on the skilled labor problem is the Federal Committee on Apprenticeship. Established by the 75th Congress to promote apprentice training, it is being converted into an important defense aid. Its job is to advise industry in the establishment of sound and efficient apprentice programs designed to provide an adequate supply of skilled hands. Now, as the need for quick training of apprentices increases, the committee is doubling its staff. The committee's field staff is

equipped to institute, in cooperation with industrial plants, streamlined apprentice programs. In the last month, demands for its services have doubled.

Hillman's job of coordinating all these far-flung efforts is a tough one and it is just begun. Before him, on paper, are the blueprints and promises of government bureaus, commissions, and offices—all thoroughly defense-conscious. His worry is to make the plans—and the bureaus—work.

Aircraft Makers Ready for Job

But they want a practical defense program and are worried about exaggerated ideas of what can and should be done. Engine-builders have own problem.

There has been so much boom-talk about the aviation business that it seems to those in this business that almost every other industry has started looking around for some way to horn in. Into that talk, as the national defense program gets under way, aviation executives are throwing some cold figures.

These are: present monthly production of planes, 500; direct labor employees on planes, 60,000; monthly capacity production on planes, 850; present monthly production of engines and propellers, 800; direct labor employees in engine plants, 16,000; monthly capacity production of such plants, 1,750. To be noted: orders on planes still don't justify operation at more than 60% of capacity; orders in the hands of motor and propeller manufacturers account for less than 50% of capacity. Total backlog of the

industry—hard to pin down in these rapidly changing times—about a billion dollars, which is no small change, but still a lot less than feature-story readers have been led to believe.

(Add to this basic information that the last released figures of the Joint Anglo-French Purchasing Commission, figured in this backlog, showed that it had placed orders for something over 8,000 planes, of which 2,000 have already been delivered—and that the British were expected to take over unfilled French orders.)

Talk of expansion centers at present on the three major engine plants. Last week the Wright Aeronautical Corp., division of Curtiss-Wright, dedicated a new plant addition in Paterson, N. J., bringing its floor space up to 2,300,000 sq. ft. The Pratt & Whitney Division of United Aircraft at East Hartford has added one new

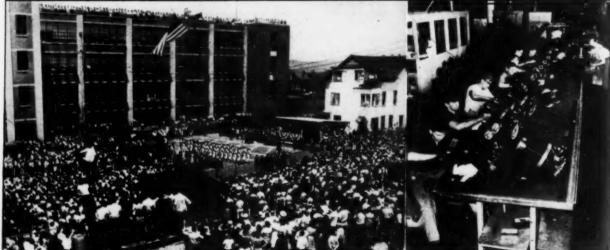
plant unit and started work on another The combined capacity of these two man ufacturers of radial air-cooled sugmes should be close to 2,500 large engines per month when their additions are a full operation. The progress of liquid smoled inline engine capacity has been lower. Sole manufacturer of this equipment is the Allison Division of General Motors at Speedway, Ind., and its ultra-modern plant, completed last winter, has not yet reached its stride. May's production was said to be up to 40 engines, with double that number expected for June and a rapid increase thereafter. Several advanced types of fighters and attack ships are awaiting these engines.

During early June the engine manufacturers met with Secretary of the Treasury Morgenthau (then charged with coordinating aviation production) and agreed to grant licensing rights to others to produce their engines if they were themselves unable to meet the demand. At the same time, manufacturing rights for the Rolls-Royce liquid-cooled engines, used extensively by the British Royal Air Force, were released for American production and Ford has been making big headlines with plans to tool up his plants to turn out these engines.

Ford's Proviso

Aviation men note with interest that Ford's promises are qualified by the phrase "without government interference," for every maker of aircraft, engines, parts or accessories for the Army or Navy has a corps of inspectors move into his plant and live with him, watching his products keenly.

But it isn't alone the rigid inspection of the Army and Navy representatives that keeps engine and plane manufac-



Wright Aeronautical Corp.'s Plant No. 2, formally dedicated last week at Paterson, N. J. (left), is touted as one of the largest buildings under one roof—containing 540,000 sq. ft. of floor space. It is constructed mainly of steel and glass, and was built in only 57 working

days to meet the growing demands of the United States defense program, as well as the Allies'. Plant No. 2 will be devoted to the output of high-powered aircraft engines, for which these workmen (right) are busy honing cylinders.

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the Power Building at the World's Fair of 1940 displays one of the outstanding reasons why C-E equipment is so frequently selected to supply steam in the plants of many of the leaders of American industry.

The reason is the unusual completeness of C-E's service. This completeness has two aspects: First, it means a complete range of capacities from the smallest C-E boiler-and-stoker combination, rated as low as 20 boiler horsepower, up to spectacular high-pressure units which can produce more than 1,000,000 lb of steam within a single hour. The second aspect refers to the great variety of C-E equipment, which means every type and size of boiler, stoker, pulverized fuel system and auxiliary equipment required

This array of equipment naturally leads to steam economy because it enables C-E engineers to recommend precisely the right types of boiler, fuel burning and related equipment for any combination of requirements. And getting the most suitable types of equipment for the load and fuel conditions of a particular plant is the first requisite in obtaining the utmost economy of steam generation. When to the right equipment is added C-E's long experience and specialized skill in the design and application of such equipment, the certain result is not only maximum economy but dependable and satisfactory operation throughout the lifetime of the installation.

If you get to the World's Fair this year, stop at the Power Building for a few minutes to examine C-E's Panorama of Steam Generation.

Miniature of FORD MOTOR COMPANY'S 1,000,000 lb. per hr. Unit

Standing 6 feet high, this true-to-life model at the World's Fair is 1/16th the size of its original, a 1,000,000-lb-per-hr C-E Unit in the Rouge Plant of Ford Motor Company, the world's largest indus-trial power plant. The construction of the model took 3,000 hours, required 4,000 feet of boiler and furnace tubing, 2.800 feet of superheater tubing and 14,000 rivets for its framing. See it at the C-E Exhibit in the Power Building.

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Must be between 35 and 45 years old, graduate good engineering school, now in responsible engineering or administrative position, preferably in heavy equipment industry, and earning not less than \$10,000 annually.

Company established 30 years. Truly unusual opportunity for right man. Give age, education, present earnings, and experience in first letter. All correspondence treated in absolute confidence.

P-289, Business Week 330 West 42nd St., New York City



Dedication of the \$1,000,000 Missouri Produce Terminal June 7 duly impressed citizens of Kansas City, Mo., with the fact that the muchpublicized \$4,000,000 municipal food terminal just across the line in Kan-

sas is no longer the only modern one in Greater Kansas City. Festivities got under way at 3 a.m., continued through the following night. Greeneyed, the municipal terminal in Kansas announced a \$700,000 expansion.

turers on the alert. Add the hard-driving buyers from the domestic airlines whose insistence on near-perfection has resulted in their brilliant safety record. So the engine-maker has no other choice than to work toward ever-increasing quality in

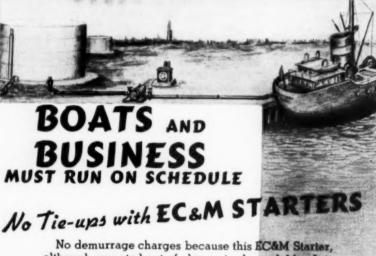
Subcontracting Urged

his product.

That is given as an important reason why it will be difficult to adapt industry practice to turning out an inferior product for a short military life as hinted by some of the members of the Council for National Defense on the basis of German tactics.

However, the engine makers are willing to try it if the government will select certain models and give them a little time and there is no doubt that production could be speeded up materially in this way—more quickly, says the industry, than by giving the job to the automobile manufacturers. Another method of increasing engine capacity which is emphasized is to turn over more of the work to subcontractors. One major engine maker now subcontracts 50% of his production and could easily do more.

However, no policies can be determined by engine-builders or plane-makers until Washington decides what it wants. While Washington talks of a production capacity of 50,000 planes a year (and this rate is far from a dead issue at the capital), it is obvious that the industry cannot increase its present 8,800,000 sq. ft. of airplane space and 4,200,000 sq. ft. of



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needs rec range at equipment. We have Without striking eral Healost. But which to pilots reskilled to through ing prooped by space five-fold overnight. To do in a thoroughly efficient way would give several years. When reached, the duction cost of the 50,000 planes per would be \$3,500,000,000 annually. bill for plant expansion would be \$500,000,000.

If Washington will settle for half this it (and it would be comforting to have 1000 planes now, instead of 4,600 as apared with about 35,000 for Geray and Italy combined) the industry I guarantee to reach that output by end of 1942 at proportionately lower st. This allows for heavy deliveries moad and 20% depletion of our own ress. Making that schedule would be ing a little better than Germany, whose it force in 1936 was about the present of ours, and in 1940 totaled 31,000.

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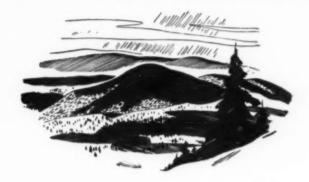
There are several methods of creating increased factory space needed for w degree of expansion. Aircraft execues point out that the least effective old be nationalization of their facto-To such nationalization by a pre-Left Wing government in France, ey attribute the failure of the French the air. The other extreme is for the eraft industry to foot the bill and then, more peaceful times, suffer from overpansion. Even now, their large cacity is worrying some manufacturers. etween these extremes is some method government financing of new plantsssibly by RFC loans. (Already some anufacturers have had conversations ith RFC officials.)

On the debated question of new-plant lection the industry holds that British sperience with "shadow plants" has hught us there must be close control of scondary plants by their parent organizations. It believes that best results will be obtained by keeping new plants as dose as possible to old ones, says there is no coincidence in the fact that the most successful shadow plant in England was the one located nearest to its parent. The engineers who create such a complicated device as an airplane must follow it through in production or much valuable time is lost.

Instruments, Trainers, Mechanics

Aviation men contend that our defense needs require better airplanes with longer range and more complete instrument equipment that those of the Germans. We have a much larger area to defend. Without bad-weather equipment the striking power and mobility of our General Headquarters Air Force would be lost. But first of all we need trainers in which to teach the thousands of new pilots required. Finally, at least 100,000 skilled mechanics, and probably several times that number, must be developed through the schools and apprentice training programs of the type already developed by several manufacturers.

WEST OF THE ALLEGHENIES



ACROSS THE HUDSON and over the Alleghenies lies the industrial heart of America. Here are produced most of the consumer and capital goods that have made this country great.

And here too, lie the financial institutions that have grown up with—and helped foster—the industrial Midwest.

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WHAT EXECUTIVES SHOULD KNOW ABOUT LOANS FOR EMPLOYES

WHEN one of your employes needs a loan to meet an emergency, he's likely to want to borrow from the company. But your company may not have a loan plan for employes. Few companies do. Most companies feel that the task of making small loans can be better performed by a special organization.

Where workers can borrow

In some plants employes have established their own credit unions. But most employes must borrow elsewhere. The worker's need for a legitimate source of credit has been recognized in most industrial states. These states have passed legislation making possible the operation of the family finance company such as Household Finance.

At Household Finance the responsible worker can borrow up to \$300 largely on his character and earning ability. He needs no bankable security, no guarantors or endorsers. For his protection the law regulates the transaction. Last year Household made over 800,000 loans to workers in all branches of industry.

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AMOUNT	AMOUNT PAID BACK EACH MONTH					
OF	Including All Charges					
LOAN	2 mos. loan	6 mos. loan	mos. loan	16 mos. loan	20 mos. loan	
\$ 20 50	\$ 10.38 25.94	\$ 3.63 9.08	\$ 1.95 4.87			
100	51.88	18.15	9.75	\$ 7.66	\$ 6.41	
150	77.82	27.23	14.62	11.49	9.62	
200	103.77	36.31	19.50	15.32	12.83	
250	129.71	45.39	24.37	19.15	16.04	
300	155.65	54.46	29.25	22.98	19.24	

Above payments figured at 2½% per month and based on prompt payment are in effect in Massachusetts and several other states. Due to local conditions, rates elsewhere vary alightly,

Families learn to avoid debt

Household believes that families should avoid unnecessary debt. So to borrowers—and to others who request the service—Household's home economists give guidance in money management. From Household's practical booklets on money management and better buymanship families learn to save on daily purchases and get more out of limited incomes. These publications are now used in many schools and colleges.

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MONEY AND THE MARKETS

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France Jolts the Metal Markets

Copper feels heaviest impact as result of the cancellation of commitments. Prospect of reallocations in world's mineral sources causing widespread concern.

METAL MARKETS THIS WEEK suffered a sharp jolt when France asked Germany for peace. Moreover, the metal trade wondered with more than casual interest if the Axis powers would wind up owning rich mines in Africa which heretofore have been controlled by England, France, and Belgium.

Heaviest impact of the French capitulation came in the copper market. France for some time has been buying approximately 25,000 tons of copper each month, and had contracted for such amounts through next November. These contracts were for copper produced outside the United States but refined in this country under bond. In every case there was a clause which called for automatic cancellation should France's war effort terminate.

Even though this business involved none but metal from foreign ores, cancellation brought fears of large supplies of copper backing up on the domestic market to the detriment of prices. There was a brief burst of hope late Monday when Secretary Morgenthau announced that Britain would take over French commitments, but it later became clear that this applied primarily to war materials. Copper isn't exactly a war material until fabrication passes beyond mere refining, and besides Britain has enough copper production within the Empire so that it could hardly have much interest in the French contracts.

Net result is that recent strength has ebbed from copper quotations. There had been premiums bid at the close of last week, particularly for immediate shipment, but these disappeared at once. Other non-ferrous metals, ever sensitive to international developments, also lost the buoyant tone which had characterized recent transactions.

Materials Control Shifts

Looking ahead to the war's aftermath, as it applies to control of mining properties, those in the industry were greatly concerned. Important reallocations loom within Europe. Equally significant are the potentialities as they apply to the modest production of minerals by countries surrounding the Mediterranean. But of the greatest importance are the pos-

sible changes in nationality of British and Belgian holdings in Africa.

Most important changes on the continent of Europe apparently will be those affecting production of iron ore. Ger. many produced only 14,000,000 tons in 1938, was obliged to import 22,000,000 France alone is quite capable of producing 40,000,000 tons of iron ore and Luxembourg 8,000,000. Germany already has taken an output running to perhaps 2,000,000 tons in Czechoslovakia and 1,000,000 in Poland. Norway adds another 1,500,000 tons of iron ore, and if the Reich gets hold of France's Algerian and Tunisian production, there would be 4,000,000 tons more. Conceivably, then, production of Greater Germany and contiguous territories which may be dominated henceforth might add up to 70,-000,000. That would press the United States for the No. 1 position.

Italy doesn't add much to the Axis strength in point of iron ore, turning out hardly 1,000,000 tons a year. However, countries which are likely to emerge under Italo-German domination—Spain, Sweden, and Yugoslavia—could boost the position of the group by 18,000,000 to 20,000,000 tons.

Returns of Nazi Aggressions

Copper is another raw material for which Germany feels a great need. The Reich produced only 30,000 tons in 1938, for example, and imported no less than 650,000. In looking for supplies, the Belgian Congo and Northern Rhodesia must loom large to the Nazi planners. These two African territories each year are capable of producing around 200,000 and 280,000 tons respectively. Norway, Sweden, Spain, and Yugoslavia would add 100,000 tons more, assuming they emerge after the war under the domination of Rome and Berlin. Moreover, Belgium would add about 100,000 tons to Germany's annual smelting capacity.

Control over these sources of supply would assure the Reich between 500,000 and 600,000 tons of copper a year. That would make an Axis trading bloc which would cut a fair figure in comparison with the United States' potential production of something over 1,000,000 tons a year. Chile, next largest producer, is rated at

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about half a million tons, and Canada concewhere around 300,000.

There are many other juicy plums to be pulled from the pie. South Africa's gold production, largest in the world, is north about \$400,000,000 a year at \$35 an ounce (and would the United States continue to pay for all the gold in sight if Germany controlled this source?). From

an industrial point of view, however, many of the secondary metals present a more interesting study.

British South Africa, for example, is quite capable of turning out 650,000 tons of manganese ore each year, and that's of paramount importance to any country with a big steel industry. This territory also has fairly substantial production of vanadium and cadmium. Rhodesia, in addition to its copper, has a large output of chromite and some vanadium. Belgian Congo and Nigeria each turn out about 10,000 tons of tin a year. The Gold Coast comes through with upwards of half a million tons of manganese ore.

In territories which the Reich already has taken over, there is some additional

Markets Defy Shocks, But Street Is Cautious

Markets are getting accustomed to jolts. Capitulation of France this week certainly was a lusty wallop—and the effects wore off after only a few minutes of trading. Stock prices dropped violently on the news, dragging commodity quotations along. Almost at once heavy buying appeared, and losses were shaved to the vanishing point before the day was over.

By the middle of the week stock prices had crept up to a point at which about one-third of the May drop had been recovered. Investment buying was evident in many old-line dividend payers on which yields recently have been the most liberal in years. Speculative interest was obvious in many directions as a result of national defense orders which have been placed or are in prospect. Unsettlement was noticeable in other sections where loss of French war orders will be felt.

Most traders are afraid to follow these markets on anything but a dayto-day basis. They don't know how fast the rearmament program will develop, how much it will be expanded in the heat of the moment, or precisely how important a factor it will be in corporate earnings (increased taxation considered). Therefore the tendency is to follow a rise only so far and to buy on an increasingly selective basis as a recovery proceeds.

Soundness of Wall Street's cautious attitude was attested this week as Congressional committees weighed limitation of profits on government contracts. The Senate Naval Affairs Committee wrote in a provision for a 7% maximum profit on plane and warship orders. Heretofore the top has been 10% on ships and 12% on airplanes. The mere fact that the House Committee on Naval Affairs flatly refused, through Chairman Vinson, to accept the new limits on profits doesn't offset the Street's inclination to discount war and rearmament profits.

Profit from Defense Program

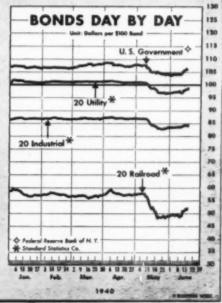
Nevertheless, there has been some share buying induced by government contracts, and various commodity markets have been strengthened by the same factors. Prices of hides and of wool were up on the supposition that the increase in the peacetime force, the enlarged training program, and the accumulation of supplies will call for both shoes and woolens. American Woolen stock issues have risen mildly on orders placed by the

Army for serge, overcoat material, and blankets. Some of the merchandising stocks were taken by investors who believe armament jobs will boost consumer purchasing power.

There has been a flurry in International Telephone & Telegraph securities recently, starting with the surrender of Paris, which assured that the French manufacturing subsidiary would not be damaged. Buying which put the common up 50%-from \$2.121 to \$3.25 a share—must be regarded as highly speculative in view of the fact that the bonds are selling at only 30% of par value. Incidentally, Business Week is informed that the company has the money for semi-annual interest payments due July 1 and Aug. 1, and Wall Street guesses that the directors will authorize the

The reason for the sharp break in tin prices in London and in Singapore on Monday (ranging from £20 to £27 a long ton) was puzzling at first. It was known that American buyers had backed away from higher prices recently posted, but that hardly seemed sufficient explanation. Later it was learned that Chinese operators were selling, apparently in the belief the Sino-Japanese war is just about over.







INSURANCE COMPANIES themselves can point to a highly successful record in the human relations side of business.

Quite naturally they were quick to realize the value of group insurance as applied to the problems of their own organizations. The special nature of these problems and the extremely efficient management methods employed by all large insurance companies have provided a rigorous "proving ground" for group insurance programs which many other businesses can employ profitably.

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Life, accident, sickness insurance, annuities, and all group lines mineral production worth noting Norway produces something under 30,000 tons of zinc, and Poland about 110,000 Austria is by far the world's largest producer of magnesite. And if Gremany dominates post-war Belgium, it will conje trol additional smelting capacity for 100,000 tons of lead, 225,000 tons of sine

Cotton Comeback?

Domestic consumption is ahead of year ago, exports have gained, but big surplus remains,

DOMESTIC CONSUMPTION of cotton continues well ahead of a year ago and this. along with substantially increased exports, has made a fair-sized deat in Uncle Sam's cotton problem, Before the present cotton year ends July 31, mills in the United States will have used well over 7,500,000 bales. Exports will account for more than 6,250,000 bales, for a total disappearance of just under 14,000,000 or about 2,000,000 bales more than this country produced in 1939.

The following tabulation (in bales) compares the present season's home consumption with the previous year and with the all-time record 1936-37 period:

1938-39	1936-37
561,000	574,000
534,000	630,000
543,000	646,000
596,000	627,000
565,000	695,000
592,000	679,000
562,000	666,000
650,000	777,000
543,000	719,000
606,000	670,000
578,000	681,000
521,000	583,000
	\$61,000 534,000 543,000 596,000 565,000 562,000 650,000 543,000 606,000 578,000

The cotton picture still has its smudges. Exports of 61 million bales against a little over 3,000,000 in the previous year were accomplished only by means of subsidy. Mill consumption in this country recently has probably somewhat exceeded new business. And, even though total disappearance topped last year's crop by 2,000,000 bales, there will remain in this country some 10,000,000 bales of, old cotton when the new crop year starts next Aug. 1.

P. S.

THE TREND still is toward lower interest rates for savers. New York savings banks generally have been paying 2% ever since the state banking authorities imposed that maximum in 1935. This week, however, cuts to 11% were prevalent, conforming with the nation-wide trend . . Apparently the Federal Crop Insurance Corp. figures winter wheat growers grabbed a good thing last fall. Autumn drought convinced farmers they needed insurance. Next year, they will have to apply for coverage and pay the premium before the crop is seeded-prior to Aug. 31 in any event.

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BUSINESS ABROAD

TOREIGN TRADE . INTERNATIONAL AFFAIRS . FOREIGN INDUSTRY

anada Not "All Out"

Despite its strenuous efforts, bminion has not reached total abilization; taxes hit new high.

phawa (Business Week Bureau)—
phile enlarged units of the Royal
madian Mounted Police round up
pens, including Italians now, and while
at contracts are being placed at the
ple of one for every few minutes of a
miness day, Canadians are beginning to
pet the full brunt of the military cataspophe in Europe. The last four weeks
ph speed attempt to put Canada's full
reght into the war immediately will reduen has ever known.

Ability to pay will be a guiding factor is tax collectors, and all income brackets all feel the war cost to a degree that all materially affect their ways of living. He new levies are direct and indirect, and will undoubtedly break new taxation gound.

Evidently the experts who wanted to mance the war from current national inme to the largest possible extent have no out against any sentiment for a more moderate course (BW—May25°40, 165), but the extent of the victory won by the pay-as-you-go school will not be known until this week's first regular war addget is read to parliament.

In Acceptable "Dictator"

"Bringing down" the budget will be the last official act of J. L. Ralston as Finance Minister. As Mackenzie King's choice to replace Minister of National Defense Norman Rogers, killed in a plane accident two weeks ago, Ralston will probably become a virtual "dictator" over all of Canada's war work. He has the confidence and support of industrialists, since he was one of the country's most successful and highest-paid corporation lawyers before the war started, and he may be able to make business take suggestions that go against the individualist grain.

In spite of the last month's frenzied efforts and the prospects of high taxes, Canada still has a long way to go down the road to total mobilization. Canadian industry is now being diverted "increasingly" to war production but any "allout" effort is certainly still around the corner.

The Canadian Manufacturers' Association, which has been putting pressure on the government for greater vigor and better organization, has just this week been asked to say just whom it would accept as a coordinator in turning Canadian plants over to the single-minded production of war materials.

It is probably politically impossible for the government to change Canada into a counterpart of the totalitarian governments at present. The most important steps that remain to be taken towards a full Canadian effort are complete national mobilization through conscription and the formation of a national government, unhampered by dissident political groups. But anti-conscription sentiment in certain parts of Canada is so strong that it would probably take an extraordinary event, such as American entry into the war and conscription in the United States, to break it down.

Japan Shows Strain

Army compelled to relax rules to aid agriculture; labor organizations to be disbanded.

Tokyo (Business Week Bureau) —Industrially and agriculturally, Japan is feeling the strain of the continuing war with China. While the army has been forced to make a concession to agriculture, the government has considered it necessary to curb labor unions in the factory districts.

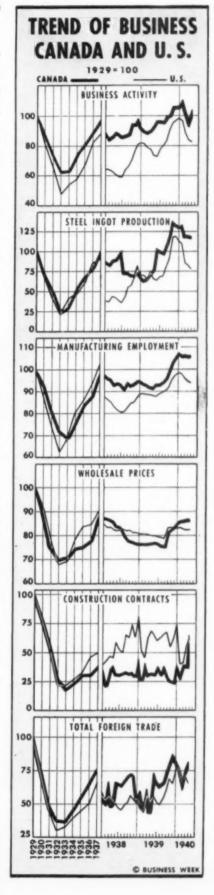
The army unbent because of a food shortage. Japanese economists have boasted about their country's self-sufficiency in rice production for years, but the plain fact now is that self-sufficiency went by the boards at the beginning of this year. In January, Japan imported as much rice from continental Asia as she had in the whole year of 1938, five times as much in February, and over eight times as much in March.

The publication of rice statistics was suspended without explanation early this year, but the Japanese, who are expert at distinguishing between varieties, know they are currently being fed imported rice, which they consider of low and untasteful quality.

Generals Yield to Economics

A shortage of farm hands, fertilizers, fuels, and farm implements caused the production slump. Bad weather, however, was officially blamed for last year's crop failure, which forced the government to throw open state-owned rice silos and undertake to import rice from Siam.

Since Japan cannot indefinitely spend her small exchange reserves on rice imports, which at the present rate exceed Nippon's yearly gold production, the army has made an allowance: employees in the arsenals, ordnance and clothing





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depots, and conscripts from agricultural districts will return home for two weeks this year during harvest time.

While the army relaxes regulations a little for the benefit of farm production, the government has begun to clamp down on industrial unions. The Japan Labor Federation and similar organizations will soon be disbanded although they are only potentially troublesome.

Unions Have Little Power

Even in its heyday, organized labor comprised less than 6% of all wage earners in Japan and in recent years it has been doubtful whether workers other than stevedores have had powerful unions. Workers never have had the legal right of federation or of collective hargaining and union membership is illegal in g ernment enterprises or in the big privi industrial plants such as Mitsu. Mits bishi, Sumitomo, and Nissan,

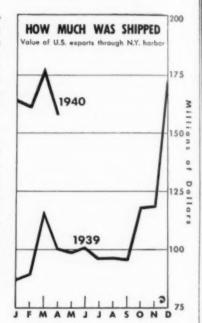
Union influence was thus confined smaller companies where surreptition support of "labor disputes" has leen si pected by Japanese police. That the has been some sort of collective action evident from the growing number workers involved in each ruckus.

Welfare Ministry statistics record to "disputes" for the first two months this year, against 136 for the correspond. ing 1939 period. But 17,728 workers are involved this year, in comparison with only 10,213 last year.

What Happens to the War Boom in Exports?

The British may or may not be able to take over and operate a significant share of the 3,000,000 ton French merchant marine, reduced only 3% by unrestricted sea war, but few American shipping experts this week doubted that the war boom in export trade to Europe would be cut short by the French capitulation.

Below is a record of outgoing vessels from the Port of New York. which represents a barometer for shipping activity the country over. for four war months compared with the same months in 1939. Number of ships to Europe increased every month this year except for April, although the tonnage of ships declined because the giant luxury liners were out of service and war materials were being moved by convoy in small, efficient, hard-to-hit freighters. Nevertheless, as the accompanying chart shows, total value of exports was up sharply.



Number of Ships

(In parentheses, net tonnage, 000 omitted)

			inuary		bruary		larch	1	pril
Europe	1940		(418)		(478)		(519)		(446)
	1939		(579)		(629)		(808)		(804)
South America	1940	76	(216)	64	(217)	75	(248)	78	(314)
	1939	31	(213)	51	(221)	64	(236)	62	(237)
Central America	1940	101	(430)	101	(415)	106	(493)	92	(366)
	1939	99	(538)	101	(646)	119	(669)	107	(576)
Asia	1940	12	(49)	14	(105)	9	(38)	10	(41)
	1939	12	(45)	11	(43)	8	(66)	16	(60)
Africa	1940	14	(48)	9	(30)	8	(31)	11	(41)
	1939	1.4	(47)	12	(47)	12	(39)	12	(41)
Australasia	1940	2	(11)	1	(4)	1	(3)	0	
	1939	1	(3)	0		0		0	
Canada	1940	17	(27)	16	(30)	24	(49)	30	(50)
	1939	14	(23)	11	(17)	18	(28)	26	(30)
Total	1940	319	(1,199)	311	(1,280)	339	(1,380)	304	(1,258)
	1939	286	(1,467)	282	(1,590)	342	(1.846)	330	(1.749)

Data: Port of New York Authority

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BRIEFED FROM THE CABLES

Moscow (Cable) -The reorientation of ade in northern Europe, with Germany the new hub, has begun. This week Danish trade delegation arrived in loscow. The details and scope of the otheoming talks are undisclosed as yet, Russia and the German satellite are spected to set figures that will greatly wred last year's Soviet-Danish trade mover. The Danes are particularly inrested in Russian fodder and other cicultural products, also oil. Moscow ants the excellent Diesel engines, ships, od railway rolling stock Denmark can nduce. Russia received its last ship Denmark in 1937. The immediate vailability of part of the Danish merhant marine, now lying in Danish and Biltic ports, all set to begin the transof of heavy shipments, is expected to red the negotiations toward a successconclusion.

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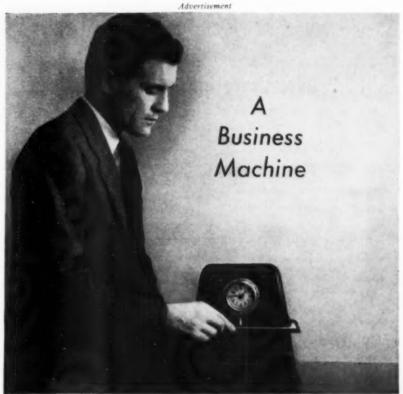
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htawa-In an effort to improve Monval's credit, sadly bent when the proncial government, took over the city's nancial affairs, Quebec Province has annnced far-reaching taxation and admintrative changes. General property taxes Montreal have been upped 10%, a new to per year tax has been levied on all atomobiles in the city and suburbs, and 82 tax a year has been put on radios. Telephones are taxed 25¢ a month. In ace of Montreal's present administraive set-up, there will be a council of 99 nembers, serving without pay. Property wners will elect 33, the voters in general vil choose 33, and various designated public and business groups will elect the emaining third. The new council is to ncet four times a year and will choose executive committee of five.

Berlin (Wireless)—The Nazis are running no risks of losing the last battle in this war—the showdown with Britain.

Despite important additions to their economic strength, acquired in the defeat of France, and despite the possibility that they may be able, with the aid of the Italians, to break the British blockade, drastic measures were still being taken in the Reich this week to becate skilled workers who might be moved from "non-essential" industries to the roaring munitions plants. At the same time a new drive was started to mobilize additional women workers in Germany's vast labor reserve.

Though German newspapers talk of an early victory over the British and the ending of the war, July food rations are not being loosened. However, people are to be allowed slightly larger rations of butter due to growing domestic output and to the reserves acquired in Denmark and Holland. The butter ration, however,



Arnold Genthe

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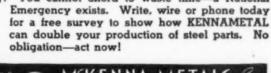
There are two ways to speed up production of steel parts for use in armaments and auxiliary equipment required by the emergency National Defense program.

The first is to acquire more floor space and install new machine tools, a time-consuming and obviously expensive method.

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merely compensates for the for her rations of margarine which are bong discontinued in July in order to eserve the raw materials used in its manufacture for next winter's supplies. This is Hitler's acknowledgment that this may yet be a long war.

LONDON (Cable) -Britain is proparing for the blow. The Bank of England has increased money in circulation le £50,-000,000 (1) because increased payrolls must be met in the arms industries where there are longer working hours and greater employment and (2) because till reserves in branch banks are being built up against the day when lines of communication may be damaged. Unemploy. ment in May stood at 880,000, a record low for England.

The labor influence in the government, credited for the recent old-age pension increases, is believed to be responsible for another important social departure: Free milk is to be distributed to households unable to afford it otherwise. Free distribution of minimum rations by the state may be the next step.

Токуо-In their enthusiasm for the "New Order" set up in East Asia, the Japanese are undergoing hardships and privations at home in order to show off their industrial prowess in their new protectorates. The threat of foreign competition is also a consideration. Thus, while automobile export figures soar, the scarcity of cars in Japan itself has become acute. Second-hand cars fetch from 50% to 200% more than their original list prices. A 1938 Ford sedan, with an original cost in Japan of about \$600, now sells for \$2,800. A 1937 Ford is worth \$1,500. The tiny Japanese Datsun is still worth its cost price after 50,000 miles.

Berlin (Cable) - Since German economic theory postulates world domination by a few great economic units-Greater Germany embracing all of central Europe; Russia; and a Sino-Japanese bloc in the Far East-plans in Washington for an economic organization of the western hemisphere are being followed in Berlin with particular interest.

The main long-range implication of the French collapse, as seen in Berlin, is the establishment of a continental economic bloc under German hegemony. Control over Lorraine iron ore has filled one of the gaps in the Reich's defense economy and it is taken for granted that some form of permanent control will be maintained over Belgian, Luxembourg, and northern French coal and steel industries. Germany will control close to 70% of Europe's coal and steel output.

Reintegration of the Alsatian potash mines will give Germany a virtual world monopoly of potash supplies, for Spain, the only other important producer, will probably be closely linked politically and economically to the Axis powers.

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THE TRADING POST

for Self-Discipline

In BEEN THINKING about this "Fifth lolums" business. Not about its menace at about its cause. Here are thousands a Americans, most of them, I suspect, and educated in this country, and is the most part, probably getting out a fife here a lot more than they could anywhere else on earth. Yet they cheerily make stooges of themselves for alien siers, hostile to every institution that thericans respect. Why? How do they get that way?

More important, is there anything we an learn from such fanatical devotion to

Part of the answer is suggested by the very titles assumed by the dictators. Fuehrer" and "Duce" both mean "lader." It is the blind acceptance of their leadership by their people that accounts for their strength. And conversely, sometimes fear that the almost utter repudiation of leadership by the people of the democracies may prove to be their title weakness.

Let me say right here that I hold no brief for dictatorship. I would not have all country become strong that way. But I am convinced that we are courting gave danger in the present world when we all but demolish the respect of our people for any leadership. And during the last couple of generations we have become so obsessed over personal rights and privileges that we have come to resent all discipline.

Now there has taken root in this country a cynicism that scorns the notion of individual sacrifice and laughs off contemptuously the perfectly natural instinct of decent men to assume the obligations incident to their privileges.

This cynicism has been nourished in many quarters and from many motives. During the last generation, for example, a horde of writers, of more or less popular togue, have deluged us with books that have sneered at personal obligation and discipline, and derided loyalty to any institutions or principles other than self-ratification and self-aggrandizement. Respect for leadership has been one of the casualties of this era.

Politicians make political capital by deriding and distorting the deficiencies of business leadership. Businessmen fight back by highlighting the scandals of political leadership. A certain breed of so-called educators cover up their own failures and work off their inferiority complexes by disparaging all leadership to the political property of the property of the

But human nature must look up to something, and all this tearing down of natural leadership has fostered a cult of mediocrity worship. Some of its high priests come out of Hollywood or the world of sports; these are adored because of their common clay and because they minister to our love of pleasure. Others are mediocrities of the pen, pulpit and politics, who never created a day's productive work for anyone. But they are articulate masters of the art of dressing up half-truths and sheer nonsense so seductively as to win the following of millions.

Of course, their chief instruments are flattery of the individual ego, exaltation of individual privilege, and contempt for the notion that the individual should pay for his privilege by any personal loyalty or discipline. The doctrine of "one man's as good as another and a damn sight bethas been hammered into our people until they have no respect for any leadership that dares tell them anything unpalatable or realistic about themselves or their attitudes. They have been taught to revile and distrust any leadership that does not beckon them into the primrose path of easy living on the labor and sacrifices of those who have gone before and will come after.

So-called political leadership—regardless of party—is not leadership at all. It is an opportunist subservience to the mandates of self-seeking blocs, willing to trade their votes for more privilege. That's not leadership; it's sheer barter.

I know there are some who say that all this is democracy as it should be. Maybe they're right. But if they are, let us see clearly that competent leadership in democracy is impotent—powerless to unite a free people in a common task, unless it can contrive means to buy their support by the bloc.

Today our country faces a crisis. To meet it successfully will require the utmost loyalty and discipline and sacrifice from all our people, regardless of special interest. It calls for the acceptance of leadership-not the barter "leadership" of the politicians, but a realistic, truthtelling leadership, competent in every phase of the task before us and not afraid to show the people what must be done and how much they must sacrifice to do it. The Fuehrer and Duce command that kind of loyalty from their people. Are American freemen so steeped in selfindulgence that they are unwilling to pay for their own preservation the kind of price that dictators exact from their followers to enslave the rest of the world? We're going to find out-and that W.T.C.

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BUSINESS WEEK

With Which A Combined The Magazine of Business

June 22, 1940

The Challenge in Latin America

A stir was created in Germany a few weeks ago when the official Nazi press agency in the United States sent word to Berlin that Washington was seriously contemplating the organization of a foreign trade monopoly to purchase and handle the marketing of all Latin America's exportable surpluses. German agents had already been booking fresh orders in Chile on the promise that the British blockade would be removed by September at the latest. And this report of a forestalling move from the north sounded like a direct threat to Hitler's well-laid plans for turning his economic guns on Latin America next.

What was rumored in Berlin became a concrete program in Washington this week. The President proposed that, since the Latin American countries, living on their exports, had lost many of their European markets because of the war, the United States set up a great trading corporation which would buy in their exportable surpluses of all commodities. The proposal is based on the belief that the centralized marketing of these products by this giant agency, backed by our vast financial resources and bargaining power, would free Latin America from any dependence on German-dominated markets,

T oday, we buy almost a third of all Latin America has to sell after supplying its own needs. In the average year these purchases amount to a little more than \$600,000,000, compared with total exports of nearly \$2,000,000,000 from south of the Rio Grande. Since other countries in this hemisphere buy another \$200,000,000 worth, the balance to be marketed in Europe and the Far East amounts to around \$1,200,000,000. This, then, is roughly what the plan for rescuing our neighbors would "cost" us.

However, it could be made to accomplish its end only if there was complete cooperation throughout the Americas and if we supplemented it with other moves equally bold and as radically contrary to our traditional practices.

As an immediate question of the kind we must face, can the President overcome the opposition of interested blocs at home to a proposal that we undertake to market 1,500,000 bales of Latin American cotton a year when we have a 10,000,000-bale accumulation of our own unsold in our warehouses?

And are we going to be as shrewd as our totalitarian competitors in making the economies of other countries work to our benefit? Brazil has become a cotton exporter of some importance in the last seven years. During these years Nazi negotiators have camped in the offices of depression-harried legislators in Rio de Janeiro or canvassed the cotton belt around São Paulo with offers to buy all the cotton that Brazil could produce.

There is no sound reason why the United States could not make similar offers to Brazil to grow the products that we, in our turn, particularly need. For instance, though it would take much longer to develop than cotton, rubber is still one of the commodities that we could buy from Brazil if a steady supply were provided. It may no longer be important that Malaya and the Netherlands East Indies can produce rubber more cheaply than Brazil if their supplies are in totalitarian hands and so available to us only on totalitarian terms. If the entire \$180,000,000 that we paid for rubber imports last year had gone to Brazil, it would have created a vast market there for all kinds of American manufactures.

Are we prepared to give our neighbors an important share in the management and profit of new exploitation companies in their lands? For we can no longer expect the profits and privileges of a generation ago, though we must take the initiative in planning, investing, and developing the raw materials in these regions or someone else will.

Talk of a new hemisphere economic bloc is futile unless we are prepared to accept the challenge that it offers. That challenge calls for imagination, for prompt action, and for the overthrow of outworn prejudices and concepts. And if this first reply to an increasingly totalitarian Europe has a suspiciously totalitarian flavor, just line it up with the alternative of a totalitarian-dominated Latin America.

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